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ABSTRACT

To provide descriptive data of practical nursing manpower and develop hypotheses based on significant relationships between responses on the questionnaires, the National League for Nursing undertook a longitudinal study of men and women who entered nursing school in the fall of 1962. Data were obtained by a series of questionnaires which had been completed at entrance to the program, upon graduation, and 1 year and 5 years after graduation. Though data from previous surveys are summarized, the main portion of the report concerns the findings 5 years after graduation. Age, marital status, and number of children were found to be closely related to the working status of those respondents who remained in the work force after 5 years. It would appear that the younger participants were at entrance, the more likely they were to withdraw from the work force during the 5 years after graduation. Family income reported by entering students was statistically related to working status, with the youngest group at entrance coming from families with higher incomes. The social index and working status of the husband were also related to the wife's employment. Recommendations are provided, and a discussion of the methodology and sample questionnaire are appended. A related report is available as ED 026 510. (SB)

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FIVE YEARS AFTER GRADUATION

by
Lucille Knopf
Barbara L. Tate
Sarah Patrylow

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NURSE CAREER-PATTERN STUDY

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FOREWORD AND ACKNOWLEDGMENTS

A certain amount of folklore surrounds every occupation and when this folklore is entrenched long enough, its maxims tend to be accepted as generalized truths. Nursing, too, has its set of traditional ideas and many of these relate to descriptions of nurses themselves. Generalizations have been drawn which range from sentimentalized pictures of personal characteristics of nurses to inspired guesses about those who choose nursing as an occupation. Although folklore contributes to the richness of an occupational culture, decisions affecting the future of an occupation must be based on more accurate information than folklore can provide.

For many years the National League for Nursing has collected statistics about nurses and nursing students. Each study usually dealt with a single facet of a problem or with a single aspect of a particular group. These studies provide useful but often fragmented information. Those who use data describing nurses and nursing students have often expressed the need for a long-term study which would accumulate pertinent data about the same group of participants from the time of their entrance into nursing school through the time that they are employed as nurses. The Nurse Career-pattern Study was designed to meet this need. From its inception, the Nurse Career-pattern Study has included samples drawn from the four types of nursing programs: the practical nursing program, the associate degree, the hospital diploma, and the baccalaureate program. Similar information is being gathered from all four samples but each sample is separate and distinct. The purpose of the study is to provide broad baseline information and no comparisons among the four groups of nursing students have been planned.

With the practical nursing sample, the subject of this report, questionnaires have been gathered up to and including the questionnaire completed five years after graduation. The age at which practical nurses begin their nursing careers, their marital status, and the number of children they have appear to be the keys to understanding their contribution to the health labor force. In this report descriptive information concerning five years after graduation is presented. This is followed by an analysis of the statistical relationship of the various descriptive items to each other.

Without the assistance and cooperation of thousands of interested persons, a study with the broad scope of the Nurse Career-pattern Study could never succeed. Both the practical nurses and the practical nursing schools have displayed continued interest and diligent cooperation. The high rate of returns to all questionnaires attests to the active support of the study by participants.

A study of this scope is also costly both in time and money. Analysis of data previously reported and published in *Nurse Career-pattern Study. Part I: Practical Nursing Programs* was partially supported by funds allocated under Section 4(c) of the Vocational Education Act of 1963 through the Office of Education, U.S. Department of Health, Education, and Welfare. We are indebted to the Esso Education Foundation for its financial assistance in supplying funds for the analysis of the data and for the printing of the current report. We also want to acknowledge our appreciation to the entire project staff for its many hours of industriousness devoted to gathering questionnaires and the preparation of this report. Miss Margery Low, Director of the Department of Practical Nursing Programs, and Dr. Mary Dineen, Director of the Department of Baccalaureate and Higher Degree Programs of NLN have been most generous with their time and their suggestions.

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CHAPTER I

SUMMARY OF PREVIOUS FINDINGS

In response to the often expressed need for factual data related to health manpower, including data describing those educated to nurse and their contribution to the health field, the National League for Nursing undertook a longitudinal study of men and women who entered nursing school in the fall of 1962. This study, the Nurse Career-pattern Study, was planned as four concurrent studies, one relating to each type of nursing program: the baccalaureate degree, the hospital diploma, the associate degree, and the practical nursing program. All four studies were conducted in a similar manner, by mailed questionnaire. This report concerns only the study of practical nursing programs.

The study was designed to be broad and exploratory. Extensive information about participants was obtained by a series of questionnaires which, to date, have been completed at entrance to the nursing program, upon graduation, one year after graduation, and five years after graduation. Statistical procedures were done for the purpose of describing participants or for suggesting possible relationships between personal or environmental factors and contributions to the health field. Since the study was not prepared to test any specific hypotheses, all factors that appear to be related as a result of the processing of the data are presented as suggestions for greater depth study. Results of the questionnaires completed through the first year after graduation by practical nurse participants have been previously described[1] and are herein only summarized to provide background information. The current report primarily concerns data obtained from the questionnaire completed by practical nurses five years after graduation (1968) and its relationship to the previous data.

The first questionnaire in 1962 asked students entering practical nursing schools for biographical information about themselves and their families, reasons for choice of nursing and of the practical nursing program, reasons for rejection of other types of nursing programs, persons in their lives who were influential in these choices, and for a description of their future career, work, and educational plans. Upon graduation (1963 or 1964), the questionnaire updated selected biographical information and repeated the items concerning future career, work, and educational plans. Again, on the third questionnaire, completed one year after graduation (1964 or 1965), certain biographical information describing marital status, number of children, and spouses' occupation and education was updated. Participants were also asked to respond to items concerning their employment in nursing, changes of position and reasons for them, nursing organization affiliations, participation in community health activities, additional education in nursing, and income from nursing. Also, four short items asked respondents whether or not nursing had met their expectations in terms of personal satisfaction, salary, working conditions, and availability of employment.

Summary of Data from Entering Students, 1962[2]

The initial questionnaire for this study was completed by 3,014 practical nursing students from 117 practical nursing schools. Data describing entering students have been presented for the total sample and by region of country in which the practical nursing school was located. As is usual in most types of nursing education programs, almost all of the students entering this sample of practical nursing schools in 1962 were female, 98 percent. Approximately half of the students were over twenty years old, about a third were married, and another 10 percent had been married at one time. About 83 percent of those who were married or formerly married had children, with 36 percent having three or more children. Almost half of the practical nursing students went to high school in communities of less than 10,000 population and 78 percent were enrolled in a practical nursing program which was located in the same state in which they had attended high school. Over three-fourths had graduated from high school and among this group 52 percent reported their academic standing to be in the top half of their graduating class. About 6 percent of the practical nursing students had previously attended nursing school and most frequently had been in a hospital diploma program. Students generally came from families in which there were two or more children and occupied a mid-position among their siblings. Approximately 80 percent of the students said they were white and 18 percent Negro. Twenty-nine percent were Roman Catholic and two-thirds belonged to one of the other Christian churches.

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[1] Barbara L. Tate and Lucille Knopf. Nurse Career-pattern Study. Part I: Practical Nursing Programs. National League for Nursing, New York, 1968.

[2] Ibid., Chap. IV.

Over 90 percent of the students and over 80 percent of their parents were native-born; 73 percent of their fathers and 86 percent of their mothers were living at the time they entered the nursing program. About 42 percent of the fathers were employed and 16 percent self-employed at the time the student entered practical nursing school. Almost a fourth of the fathers were classified as skilled workers, about 14 percent were farmers or ranchers, and 13 percent were sales and clerical workers. About a quarter of the mothers of entering students were employed and almost 2 percent self-employed. Usually mothers did sales, clerical, or semiskilled work. Very few of the practical nursing students had parents in health-oriented occupations. Three percent of mothers were nurses and this group was about equally divided between registered nurses and practical nurses. More than a third of both fathers and mothers were reported to have had 8 years or less of education; 19 percent of fathers and 23 percent of mothers had completed 12 years of school. Regarding family income, 43 percent of the students reported an annual family income of less than $5,000 and 68 percent less than $7,500.

The desire to be of help to others was the most frequently mentioned reason for choosing nursing, given by two-thirds of the students. Almost equal proportions, about 17 percent in each category, chose nursing because they felt it was a good and respected profession, in order to achieve personal satisfaction and fulfillment, or for reasons of economic security. About 12 percent said that they had already done some health work. About a fourth of the participants simply stated that they had always wanted to be a nurse. When students were asked to name the person who had been most influential in their decision to choose nursing, approximately 60 percent mentioned friends, acquaintances, or members of their immediate families. In many cases, the occupational grouping of those named as influential could not be determined but if students did give the occupation, it was most frequently a nurse. Predominantly, students had chosen the practical nurse program because it was shorter than other nursing programs. Additional reasons for this choice, in proportions that varied only slightly from one category to the next, were because they met the entrance qualifications, because the program had been recommended to them, for financial reasons, and for personal reasons. A smaller group of students felt that their age made any other type of nursing program unfeasible.

Students generally had chosen a specific practical nursing school because it was conveniently located or because they had reason to believe that it was a good school. When practical nursing students gave their reasons for not choosing other types of nursing programs, the same general areas were mentioned: the length of the program, finances, entrance qualifications, and age. However, a considerable proportion, more than 15 percent, mentioned that they did not know the meaning of the terms "baccalaureate degree," "hospital diploma," or "associate degree program." It was assumed that the terms used on the questionnaire confused respondents rather than their lack of knowledge of the existence of registered nurse education.

For the most part, entering students thought that after graduation they would work as staff nurses in hospitals. About two-thirds indicated that they intended to work after marriage or continue to work if already married. Many respondents qualified their work plans as being contingent upon the needs of their children, the family economic situation, or their husbands' wishes. In planning their future, about 45 percent thought they would continue their education beyond graduation from the practical nursing program. Data from the initial questionnaire indicate that entering practical nursing students covered a wide age range; if younger, they might very well be attending a high school practical nursing program. Among the older group, many were married women with home responsibilities. The majority of the entering students was composed of those who stated they did not have the academic qualifications to enter a registered nurse education program and wished to prepare for a gainful, satisfying occupation in a school which was conveniently located, taking a course which was relatively short and inexpensive.

Characteristics Related to Graduation and Withdrawal[3]

Two of the principal areas of interest in this study are the relationship of individual personal characteristics to completion of the practical nursing program and to employment in nursing after graduation. It was also planned to trace the continuity of the respondents' thinking and planning from the start of their association with nursing through actual goals realized after graduation. Almost all responses from the initial questionnaire were examined statistically by graduation or withdrawal and by employment status after graduation. Other items selected for statistical examination were those which could be analyzed in terms of continuity of career goals and plans.

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[3] Ibid., Chaps. V, VII, and VIII.

Of the 3,014 students who entered the practical nursing schools in this study, 2,336, or 77.5 percent, graduated and 678, or 22.5 percent, withdrew before graduation. For each student who did not complete the practical nursing program, the director of the school was asked to indicate one reason for failure. More than a third of the students withdrew because of scholastic failure. About 15 percent faced personal problems, 12 percent were considered by the school faculty to be unsuited for nursing, and similar proportions, approximately 11 percent in each case, had lost interest in nursing or developed health problems.

When the director's reason for students' withdrawal was compared with the age of the students, it was found that about half of the students under thirty had withdrawn because of academic problems; but among students over thirty years of age, illness and personal problems accounted for the greater proportion of withdrawals. There were statistically significant differences between regions of the country (as used in this study) and graduation rates. The Midwestern region had the highest graduation rate and the North Atlantic the lowest.

Marital status at time of entrance to the nursing program was related to withdrawal or graduation. Those already married at entrance to the program had the highest graduation rate, the single were next, and the formerly married graduated least frequently. For the women in the sample, age at entrance was related to graduation and withdrawal. The highest proportions graduating were from twenty-five to thirty-four years old and the lowest proportion were between fourteen and seventeen years of age. The size of the community in which the respondents were living while they attended high school was related to graduation or withdrawal. Those from large metropolitan areas with populations over 1,000,000 graduated less frequently than those residing in smaller communities.

As might be anticipated, graduation from high school and academic standing in the high school graduating class were also related to practical nursing school graduation or withdrawal. Those who had completed high school and who had been in the top half of their high school graduating class graduated from the practical nursing program more frequently than those who had not completed high school or those who had finished high school in the lower half of their class.

All of the variables described thus far which are related to graduation or withdrawal: region of the country, marital status, age, size of community of residence during high school, high school graduation, and academic standing in high school may well be affected by the composition of the sample of practical nursing schools in this study. Many of the high school practical nursing programs were located in the North Atlantic region. Usually the students in these programs were single, young, still attending high school, and living in large cities. Because these characteristics were not shared to the same extent by the respondents in other regions, it is possible that this contributed to statistical results. The need for a deeper study of the high school practical nursing student was one of the recommendations of the previous report.

Three other biographical characteristics were also related to graduation and withdrawal. There was a relationship between the respondents' family composition and graduation and withdrawal. Respondents who came from families with two or more children graduated more frequently than did the only child. The participants who said they were white graduated more frequently than did those who indicated they were Negro, Oriental, or belonged to some other ethnic grouping. Those belonging to the Christian churches graduated more frequently than did those who stated they had no religious preference or who were of the Jewish faith.

Generally, neither reasons for choice of nursing nor variables describing parents were statistically related to graduation or withdrawal. But among the reasons for choice of nursing, two items were related. They were, first: those who sought nursing to gain personal satisfaction and fulfillment graduated more frequently than those who did not mention this item. Second: those whose responses indicated a spiritual commitment graduated more frequently. There was also a relationship between graduation and withdrawal and the person named as most helpful in assisting the respondent in making the choice of a nursing career. The highest number of graduations occurred among those who mentioned a member of the clergy, a religious sister, or God as their main source of help. The second greatest proportion of the graduates had received help or advice from nursing students, a relative in health-oriented or nursing work, or other nurses. A higher withdrawal rate was noted among those who mentioned a guidance counselor as their main source of career help.

About four to six weeks prior to graduation, questionnaires were sent to all the participating schools for the practical nursing students who were due to complete the program. Of the 3,014 original participants, 2,336 are known to have graduated. Questionnaires were returned by 2,299, or 98.4 percent, of the graduates.

There was some change in marital status between entrance and graduation; about 3 percent of the participants had married during their time in school. Almost 80 percent of the respondents' husbands or wives were employed, usually in skilled trades, sales or clerical work, or semiskilled work. More than two-fifths of the spouses had completed 12 years of education. More than three-quarters of the graduates stated that they planned to work in nursing after marriage, and about a third were also planning to continue their nursing education. For the most part, graduates thought they would have to finance their future education by their own earnings and that their employment in nursing would be as hospital staff nurses working on general, medical, surgical, or maternity units.

One Year After Graduation[4]

Approximately one year after the date of graduation, each practical nurse who had responded to the second questionnaire was sent the third questionnaire. Responses were received from 2,167, or 94.3 percent. As might be anticipated, many of the practical nurses had married since their graduation; in fact, proportions of single and married had almost reversed since the initial questionnaire had been completed. One year after graduation, over half of the participants were married and slightly more than a third single. As had been indicated on the second questionnaire, practical nurses were generally married to skilled workers who had had at least 12 years of education. About three-fourths of the husbands or wives of respondents were reported to be employed or self-employed.

Approximately 75 percent of the practical nurses were working full time one year after graduation, about 8 percent part time, and 14 percent said they were not working. Usually respondents were working as staff nurses in hospitals; more than a third were doing general or medical nursing and another fifth either surgical or medical-surgical nursing. Over 60 percent had had only one position since graduation. Of the 20 percent who had changed jobs or positions at least once during their first year in practical nursing, the most frequently stated reason for this change was that they had moved or that the location of the employing institution proved to be inconvenient. About 30 percent of the practical nurses were members of some nursing-related organization, usually their nursing school alumni or the National Federation of Licensed Practical Nurses. Very few respondents, less than 10 percent, had participated in any health-related community activity. The number continuing their nursing education during the first year after graduation was small. About 6 percent had taken some type of inservice or postgraduate course and less than 2 percent were in an educational program which would lead to licensure as a registered nurse. When practical nurses took specific nursing courses, they most often studied pharmacology or the administration of medications.

Respondents were asked if nursing had met their expectations in terms of personal satisfaction, salary, working conditions, and the availability of employment. Over 90 percent felt nursing had met their expectations regarding personal satisfaction, about 83 percent found employment readily available, about 72 percent thought working conditions were as anticipated, but only 43 percent were satisfied with their salary as practical nurses. For full-time work as a practical nurse during the data-collection years of 1964 and 1965, nearly one-third reported a monthly salary between $201 and $250; another 28 percent were earning between $251 and $300, and another fifth between $101 and $200.

Variables Related to Employment[5]

Graduates who were married at the time of entrance were most likely to be working one year after graduation. However, when separated by full- or part-time work, a higher proportion of the single or formerly married at time of entrance were employed full time and a higher proportion of married were employed part time. Participants who had married or remarried since entrance were less likely to be working than those whose marital status had not changed. Participants who married after graduation and who were working changed their position during the first year of employment more frequently than did participants who had been married prior to their entrance into the practical nursing program. It appears that change of marital status may have influenced employment.

Employment one year after graduation and age at the time of entrance to the program had an inverse relationship. The youngest group, fourteen-seventeen years old, had the highest proportion of those not working at all.

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[4] Ibid., Chap. VI.

[5] Ibid., Chap. VIII.

For full-time employment, there was no discernible pattern between working and age, but for part-time employment, those thirty and over were working in higher proportions than the younger participants.

High school graduation prior to completion of the practical nursing program was related to employment: high school graduates constituted a higher proportion of the labor force one year after graduation than non-high school graduates. Family income, as reported on the initial questionnaire, was also related to working. Those reporting lower family incomes were more apt to be working one year after graduation. However, the highest proportions reporting part-time employment came from the higher income brackets.

Other Related Variables[6]

Other variables subjected to statistical examination included those which might help clarify respondents' activity in the health labor force or the progression of their nursing careers. The item "Has your work in nursing met your expectations in terms of salary?" was related to region of the country in which the practical nursing school was located. The largest percentage of those who responded positively regarding salary occurred in the Western region and the smallest in the Southern. Those who had given an economic reason for choice of nursing were only a small proportion of the total sample, approximately 18 percent; however, this group was more likely to be dissatisfied with their earnings than those who had not mentioned an economic reason for choice of nursing.

There was a difference between reported monthly salary and sex of respondents. For full-time employment, the median salary for women was between $201 and $251, and for men between $251 and $300. However, because of the small number of men in the study and because some of the men stated they held two positions, these findings cannot be considered conclusive.

Another question asked the practical nurses whether or not nursing had met their expectations in terms of working conditions. This response was related to those who had mentioned previous health work experience as one of their reasons for choice of nursing. Those who had had health work experience prior to their entrance into the practical nursing program were more likely to indicate that working conditions had met their expectations.

On the initial questionnaire and again at graduation, respondents had been asked about their future plans for additional nursing education. One year after graduation, the percentage of those attending an educational program beyond the practical nursing program was higher among the group who had indicated an intent for further education at the time of entrance than among those who had expressed no interest in further education. However, the actual number of respondents who did pursue additional preparation was small. Further education was examined in relation to working status one year after graduation. Usually those who had taken courses were employed full time.

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[6] Ibid., Chap. VIII.

CHAPTER II

PRACTICAL NURSES FIVE YEARS AFTER GRADUATION

Data in this chapter describe 1,872 individuals five years after their graduation from the practical nursing programs in the study. The mailed questionnaire, by which the data were received, was the fourth of a series begun at the time the participants entered nursing school in 1962. The group who responded to the fourth questionnaire were 81.8 percent of the total number to whom it had been sent.[1] The material in this chapter provides frequencies and percentages, usually by region of the country. The regions referred to denote the location of the practical nursing schools students attended when they became study participants. When "graduation" is mentioned without being further described, graduation from the practical nursing program is meant to be understood. Graduates are classified according to the region of their practical nursing school, even though some individuals may have moved to other areas of the country and some may have attended and graduated from registered nurse programs. A few participants transferred to and graduated from practical nursing programs other than the one they originally entered. The term "practical nurse" is used to refer to all respondents: the few who were never licensed, the majority who hold practical nurse or vocational nurse licenses, and the small group who have gained registered nurse licensure. Where it is intended to differentiate those who subsequently became registered nurses from the licensed practical or vocational nurses, it is so stated. The descriptive material, with which this chapter is concerned, covers the marital status, children, and spouse of the respondents, their current working situation, certain aspects of their employment history, their involvement in nursing organizations and community activities, and their attainment of licensure and further education.

Marital Status

Marriage and Children

Five years after graduation, by far the greatest proportion of participants in this study, 73.8 percent, reported themselves as married, whereas only 36.1 percent had been married at the time of graduation (Table 2-1). Those remaining single were 14.6 percent and the formerly married 10.8 percent; five years before, the single were 53.8 percent and the formerly married 9.7 percent. The number of members of religious communities decreased from eight to seven during the five years after graduation.

Table 2-1. Marital Status of Practical Nurses at Graduation and Five Years Later

Marital Status	At Graduation		Five Years After Graduation	
	No.	%	No.	%
Single	1,237	53.8	273	14.6
Married	831	36.1	1,381	73.8
Formerly married	222	9.7	203	10.8
Religious	8	0.3	7	0.4
Undetermined	1	0.0	8	0.4
Total	2,299	100.0	1,872	100.0

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[1] The method of data collection is described in Appendix A.

Greater detail, showing marital status according to sex and region of country, is given in Table 2-2. Region I had the lowest proportion of married, widowed, and divorced women, 67.2 percent, 1.6 percent, and 3.2 percent, respectively, together with the highest proportion of single women, 24.3 percent. Region II had the highest proportion of married women, 77.1 percent, and Region III contained the most women who were divorced or separated, 7.4 percent and 2.5 percent. Region IV had the highest proportion of widows, 4.8 percent, and the lowest proportion of women separated from their husbands, 0.7 percent. Single men in each region were 0.5 percent or less. Married and formerly married men ranged from 0.2 percent in Region I to 2.3 percent in Region III. There were only two formerly married men in the entire sample, one in Region II who was separated from his wife and one in Region III who was divorced. Five years after graduation proportions for women in the sample were: 14.3 percent single, 72.7 percent married, 3.3 percent widowed, 5.6 percent divorced, 1.8 percent separated, and 0.4 percent sisters in religious communities. Of the total sample, 0.3 percent were single men and 1.2 percent married or formerly married men.

Table 2-2. Marital Status of Practical Nurses Five Years After Graduation, by Geographic Region of School*

Marital Status	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Single women	135	24.3	56	10.8	46	8.7	31	11.5	268	14.3
Married women	373	67.2	400	77.1	390	73.7	198	73.6	1,361	72.7
Widowed women	9	1.6	16	3.1	24	4.5	13	4.8	62	3.3
Divorced women	18	3.2	31	6.0	39	7.4	17	6.3	105	5.6
Separated women	12	2.2	7	1.3	13	2.5	2	0.7	34	1.8
Religious	4	0.7	2	0.4	1	0.2	0	0.0	7	0.4
Single men	3	0.5	1	0.2	0	0.0	1	0.4	5	0.3
Married and formerly married men	1	0.2	5	1.0	12	2.3	4	1.5	22	1.2
Undetermined	0	0.0	1	0.2	4	0.8	3	1.1	8	0.4
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

*Region I (North Atlantic) Conn., Del., D.C., Me., Mass., N.H., N.J., N.Y., Pa., R.I., Vt.
II (Midwestern) Ill., Ind., Iowa, Kan., Mich., Minn., Mo., Neb., N.D., Ohio, S.D., Wis.
III (Southern) Ala., Ark., Canal Zone, Fla., Ga., Ky., La., Md., Miss., N.C., Okla., Puerto Rico, S.C., Tenn., Tex., Va., Virgin Islands, W.Va.
IV (Western) Alaska, Am. Samoa, Ariz., Calif., Colo., Guam, Hawaii, Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo.

When respondents failed to answer the item regarding marital status, records of previous questionnaires were examined. If participants were women who had responded as single on all earlier questionnaires and if they had retained the same last name, they were considered to be single. However, for one man and seven women previously recorded as married, widowed, divorced, or separated, current marital status could not be determined. The tables thus far considered are based on the total number of respondents. Tables 2-3 through 2-8 contain data describing only the married and formerly married men and women and those whose marital status was undetermined.

The percentage of those whose marriage had taken place after graduation ranged from 33.8 percent in Region III to 66.3 percent in Region I (Table 2-3). Conversely, those who had married before graduation ranged from 30.8

percent in Region I to 56.4 percent in Region III. There was a higher proportion of non-response to this question in Regions III and IV, 9.8 percent and 11 percent, and a lower proportion in Regions I and II, 2.9 percent and 4.1 percent. For the total sample of those who had ever been married, 49.4 percent were married after graduation, 44.1 percent before graduation, and 6.5 percent did not answer.

Table 2-3. Marriage of Practical Nurses Before and After Graduation, by Geographic Region of School*

Time of Marriage	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Marriage after graduation	274	66.3	264	57.4	163	33.8	85	35.9	786	49.4
Marriage before graduation	127	30.8	177	38.5	272	56.4	126	53.2	702	44.1
No answer	12	2.9	19	4.1	47	9.8	26	11.0	104	6.5
Total	413	100.0	460	100.0	482	100.0	237	100.0	1,592	100.0

*Those who have never been married and those classified "religious" are omitted from table.

The percentage of married or formerly married respondents reporting either no children or one child decreased in order from Region I through Regions II, III, and IV (Table 2-4). The percentage reporting three, four, five and more tended to increase in order through the same regions. The range of those reporting no children was from 10.5 percent in Region IV to 16.5 percent in Region I; and for one child, from 19.8 percent in Region IV to 32 percent in Region I. For two children, the greatest difference between any two regions was less than 2 percent. Families with three, four, and five or more children were at their lowest in Region I, 10.7 percent, 2.4 percent, and 3.1 percent, respectively. Four-children families were found with greatest frequency in Region III, constituting 8.1

Table 2-4. Number of Children of Married and Formerly Married Practical Nurses Five Years After Graduation, by Geographic Region of School*

Number of Children	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
None	68	16.5	66	14.3	53	11.0	25	10.5	212	13.3
One	132	32.0	116	25.2	114	23.7	47	19.8	409	25.7
Two	110	26.6	131	28.5	133	27.6	67	28.3	441	27.7
Three	44	10.7	69	15.0	74	15.4	44	18.6	231	14.5
Four	10	2.4	23	5.0	39	8.1	17	7.2	89	5.6
Five or more	13	3.1	20	4.3	28	5.8	17	7.2	78	4.9
No answer	36	8.7	35	7.6	41	8.5	20	8.4	132	8.3
Total	413	100.0	460	100.0	482	100.0	237	100.0	1,592	100.0

*Those who have never been married and those classified "religious" are omitted from table.

percent of that region. Families with three children or with five or more showed their highest percentages, 18.6 and 7.2, in Region IV. For the total sample, more than half the married and formerly married practical nurses had one or two children, 25.7 and 27.7 percent, respectively. Next most common were three-children families, constituting 14.5 percent, and families with no children, 13.3 percent. Only 5.6 percent of the families had four children, and 4.9 percent five or more. There were 8.3 percent who did not answer the question.

Characteristics of Spouse

Respondents were asked to give information regarding the occupation, the employment status, and the educational background of their husbands and wives. In general, occupation of spouse showed similarity of proportion in each category across geographic regions. In the total sample, approximately a quarter of the husbands or wives, 25.4 percent, were in the group of occupations classified[2] as skilled trades (Table 2-5). These included specialists

Table 2-5. Occupation of Spouse of Practical Nurses Five Years After Graduation, by Geographic Region of School*

Occupation	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Medical professional	8	1.9	3	0.7	6	1.2	2	0.8	19	1.2
LPN or LVN	1	0.2	3	0.7	10	2.1	1	0.4	15	0.9
Allied medical	7	1.7	7	1.5	10	2.1	2	0.8	26	1.6
Service-type	24	5.8	33	7.2	19	3.9	12	5.1	88	5.5
Professional and semiprofessional	38	9.2	39	8.5	20	4.1	13	5.5	110	6.9
Sales and clerical	67	16.2	67	14.6	58	12.0	36	15.2	228	14.3
Clergy	1	0.2	5	1.1	5	1.0	4	1.7	15	0.9
Owner of business	14	3.4	5	1.1	9	1.9	4	1.7	32	2.0
Military--officers and enlisted	16	3.9	8	1.7	22	4.6	6	2.5	52	3.3
Farmer and other out-of-door	12	2.9	19	4.1	7	1.5	14	5.9	52	3.3
Skilled worker	113	27.4	115	25.0	124	25.7	52	21.9	404	25.4
Semiskilled and unskilled worker	50	12.1	64	13.9	60	12.4	33	13.9	207	13.0
Student	6	1.5	12	2.6	3	0.6	6	2.5	27	1.7
Unemployed and uncodeable	20	4.8	37	8.0	62	12.9	28	11.8	147	9.2
No answer	36	8.7	43	9.3	67	13.9	24	10.1	170	10.7
Total	413	100.0	460	100.0	482	100.0	237	100.0	1,592	100.0

*Those who have never been married and those classified "religious" are omitted from table.

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[2] For details describing coding of occupational information, see Barbara L. Tate and Lucille Knopf. Nurse Career-pattern Study. Part I:. Practical Nursing Program. National League for Nursing, New York, 1968, Appendix B.

in the installation and maintenance of machinery and home appliances, automobile mechanics, electricians, printers, butchers, railroad engineers, and others in similar types of work. (The identical percentage of spouses of practical nurses were reported as skilled workers when the third questionnaires were filled out four years previously.) Another quarter of the spouses' occupations were accounted for by 13 percent in semiskilled or unskilled work and 14.3 percent in sales and clerical jobs. The semiskilled were largely factory workers; the unskilled included chauffeurs, cleaning personnel, watchmen, and other laborers. The sales and clerical category included 70 spouses in sales, ranging from insurance brokers to grocery store clerks. The category also included 85 spouses in minor supervisory positions (e.g., office manager, warehouse supervisor), 30 clerks (e.g., mail clerk, parts man, railroad conductor), 26 bookkeepers or cashiers, and smaller numbers in such positions as stenographers, office machine operators, receptionists, or meter readers. The other occupational groups each made up less than 7 percent of the total. Two of these smaller categories may not be self-explanatory. The "service-type" group included 43 teachers, 27 persons in police or fire work, and smaller numbers in other government positions or in non-medical social work. "Professional and semiprofessional" was used to group together 34 trained engineers, 14 accountants, and a scattering of others such as artists, systems analysts, physical scientists, lawyers, surveyors, and radio announcers.

In the entire sample, 3.7 percent had spouses in health-related occupations (the "medical professional," "L.P.N. or L.V.N.," and "allied medical" categories). Among the women, 5 were married to physicians, 6 to dentists, and 5 to other medical professionals. Of the 22 married men included in Tables 2-3 through 2-8, 12 had been married before graduation from practical nursing and 15 had wives who were currently employed. Three of these wives were registered nurses, 6 were practical nurses, 2 were doing other health-related work, 2 were in clerical positions, and 2 were in other occupations. As for the 9.2 percent of spouses whose occupations were classified as unemployed and uncodeable, they were 60 deceased, 24 retired, 7 invalids, 5 housewives, 3 temporarily out of work, and 48 for whom the respondents gave the name of an occupation which could not be identified. Information concerning spouse's occupation was often omitted by formerly married persons and occasionally by currently married ones. This accounted for 10.7 percent of the sample.

Spouses of the respondents were classified as self-employed, employed by others, and unemployed or unidentifiable. Self-employed spouses ranged from 6.5 percent in Region II to 11.8 percent in Region IV, and employed spouses from 61.6 percent in Region IV to 79.2 percent in Region I (Table 2-6). The proportion of those not employed and of those whose employment status was not identifiable ranged from 13.6 percent in Region I to 26.6 percent in Region IV. Not only in each region, but in the total sample as well, the great majority of spouses were employed by others. This was 72.4 percent of the whole group. The self-employed made up 7.7 percent. For the most part, the 20 percent described in the category "not employed and not identifiable" were those for whom neither occupation nor employment status was named. A few in this category were retired or temporarily out of work.

Table 2-6. Employment Status of Spouse of Practical Nurses Five Years After Graduation, by Geographic Region of School*

Employment Status	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Self-employed	30	7.3	30	6.5	34	7.1	28	11.8	122	7.7
Employed	327	79.2	347	75.4	332	68.9	146	61.6	1,152	72.4
Not employed and not identifiable	56	13.6	83	18.0	116	24.1	63	26.6	318	20.0
Total	413	100.0	460	100.0	482	100.0	237	100.0	1,592	100.0

*Those who have never been married and those classified "religious" are omitted from table.

Social index is an artificial composite of occupation and the number of years of education.[3] According to this scheme, index numbers from one to five could be assigned. The occupations assumed to be most complex and requiring the longest preparation are assigned index number one; those considered to include functions that are simple to learn and perform, index number five. In this sample, the greatest proportions were at the fourth position, the range being from 34.2 percent in Region IV to 49.4 percent in Region I (Table 2-7). This level, which included 41.8 percent of the total sample, was comprised mainly of skilled workers with 9 to 15 years of education. To a lesser extent, it contained sales and clerical workers with up to 12 years of education and semiskilled workers with 12 or more years of education. Practical nurses with 12 or 13 years of education, the description of most of the respondents in this study, also would be assigned social index four, the same as many of their spouses. Positions above four in the scale decreased in percentage of spouses to whom they were assigned, there being 11.2 percent of the sample assigned level three, 6.3 percent level two, and 4.6 percent level one. The lowest position, five, was assigned to 9.2 percent of the spouses. For 26.9 percent the social index could not be identified. This

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[3] August B. Hollingshead. Two-Factor Index of Social Position. New Haven, Conn., 1957. (Mimeographed)

Table 2-7. Social Index of Spouse of Practical Nurses Five Years After Graduation, by Geographic Region of School*

Social Index	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
One	22	5.3	24	5.2	17	3.5	10	4.2	73	4.6
Two	33	8.0	34	7.4	20	4.1	13	5.5	100	6.3
Three	42	10.2	65	14.1	43	8.9	28	11.8	178	11.2
Four	204	49.4	187	40.7	194	40.2	81	34.2	666	41.8
Five	26	6.3	33	7.2	58	12.0	29	12.2	146	9.2
Unidentified	86	20.8	117	25.4	150	31.1	76	32.1	429	26.9
Total	413	100.0	460	100.0	482	100.0	237	100.0	1,592	100.0

*Those who have never been married and those classified "religious" are omitted from table.

Table 2-8. Education of Spouse of Practical Nurses Five Years After Graduation, by Geographic Region of School*

Education	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
8 years and under	8	1.9	12	2.6	46	9.5	14	5.9	80	5.0
9, 10, and 11 years	51	12.3	56	12.2	108	22.4	31	13.1	246	15.5
12 years	178	43.1	174	37.8	171	35.5	95	40.1	618	38.8
13, 14, and 15 years	94	22.8	114	24.8	62	12.9	38	16.0	308	19.3
16 years and over	56	13.6	66	14.3	40	8.3	31	13.1	193	12.1
No answer or ambiguous	26	6.3	38	8.3	55	11.4	28	11.8	147	9.2
Total	413	100.0	460	100.0	482	100.0	237	100.0	1,592	100.0

*Those who have never been married and those classified "religious" are omitted from table.

percentage included those whose occupation or education was not stated or whose occupational information was not sufficiently descriptive for a judgment to be made. In the latter group were many who were self-employed. Social index determination for the self-employed is based not only on occupation but also on a factor, size of business, which was not asked of respondents.

Twelve years of education for the husband or wife was most common in each region (Table 2-8). The range was from 35.5 percent in Region III to 43.1 percent in Region I. Region III had by far the most spouses with less than 12 years of education and the fewest with more than 12. Regions I, II, and IV were uniform in pattern. The second greatest category in these three regions was the 13-, 14-, and 15-year group, followed in order by those with 16 or more years of education. Decreasing proportions in these three regions were those with 9, 10, or 11 years, and finally those with 8 years or less. Spouses with 12 years of education accounted for 38.8 percent of the total sample. Those with 13, 14, or 15 years and those with 9, 10, or 11 years were 19.3 percent and 15.5 percent, respectively. Sixteen years and over was 12.1 percent and 8 years and under was 5 percent. No answer or an ambiguous answer was given by 9.2 percent of all the respondents who had ever been married.

Current Employment

Employment/Non-employment

Five years after graduation more than half of the respondents were working full time as practical nurses (Table 2-9). There was one region in each category of response to the question, "Are you working as an L.P.N. or L.V.N.?" that was different from the other regions. For instance, Region III had 64.5 percent (as compared with a range from 44.9 percent to 51.3 percent in the other regions) working full time; 7.9 percent (versus a range from 12.6 percent to 16.9 percent) working part time; and 17.4 percent (contrasted with a narrow range from 28.1 percent to 29.9 percent in the other regions) who were not employed. Region I had 4 percent, the highest proportion, employed as registered nurses and the lowest proportion, 1.8 percent, employed in fields not related to health. Region IV had 3.7 percent (versus 1.5 percent or less in the other three regions) who were employed in a field that

Table 2-9. Employment Status of Practical Nurses Five Years After Graduation, by Geographic Region of School

Employment Status	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
L.P.N./L.V.N.										
Full-time	249	44.9	266	51.3	341	64.5	130	48.3	986	52.7
Part-time	94	16.9	75	14.5	42	7.9	34	12.6	245	13.1
Other/ambiguous time	1	0.2	4	0.8	13	2.5	4	1.5	22	1.2
Registered nurse	22	4.0	4	0.8	6	1.1	4	1.5	36	1.9
Health-related field	4	0.7	8	1.5	8	1.5	10	3.7	30	1.6
Non-health field	10	1.8	16	3.1	24	4.5	9	3.3	59	3.2
Not employed	166	29.9	146	28.1	92	17.4	78	29.0	482	25.7
Employment status ambiguous	9	1.6	0	0.0	3	0.6	0	0.0	12	0.6
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

was not nursing but was related to health. Of the total sample, 52.7 percent were working as licensed practical nurses on a full-time basis (33 or more hours per week), 25.7 percent were not employed at all, and 13.1 percent were working part time (1 to 32 hours per week). Much smaller proportions were employed as registered nurses, as licensed practical nurses in positions with unusual or ambiguous patterns of hours per week, or in non-nursing fields. For a very small minority, 0.6 percent, it was unclear whether they were or were not employed.

There were (see Table 2-9) 482 respondents who were not working, 89 who were working in fields other than nursing, and 12 whose responses were unclear as to whether they were working or not. Table 2-10 presents the reasons given by this total number, 583 participants, for not being employed as nurses. Region III differed from the other regions in the proportions of respondents in certain categories. For example, those not nursing for family and personal reasons were 34.6 percent of Region III as compared with from 47.4 to 62.4 percent in the other regions. Those not working in nursing because they could earn more at other work were 14.2 percent in Region III and from 1.6 to 6.5 percent in the other regions. Of the entire group currently not working in nursing, 51.5 percent checked "family and personal" as their reason for not doing so. If to this figure were added the 8.2 percent who indicated "pregnancy and children," the 4.5 percent who marked "financially unnecessary," and the 5 percent who combined two of these reasons, nearly 70 percent would be accounted for by reasons having to do with the respondents' personal lives. Reasons concerned with nursing itself included 6 percent who said they could earn more at other work, 5 percent who could not find satisfactory positions and/or hours, and 1.4 percent who had lost interest in nursing. A variety of other reasons were given by 12.2 percent, and 6.3 percent gave no clear answer.

Table 2-10. Reasons for Non-employment in Nursing by Practical Nurses Five Years After Graduation, by Geographic Region of School

Reasons	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Family and personal	104	55.0	106	62.4	44	34.6	46	47.4	300	51.5
Pregnancy and children	23	12.2	11	6.5	12	9.4	2	2.1	48	8.2
Financially unnecessary	8	4.2	6	3.5	8	6.3	4	4.1	26	4.5
Combination of two above	10	5.3	5	2.9	5	3.9	9	9.3	29	5.0
Earn more at other work	3	1.6	11	6.5	18	14.2	3	3.1	35	6.0
Lost interest in nursing	4	2.1	0	0.0	3	2.4	1	1.0	8	1.4
Available position and/or hours unsatisfactory	4	2.1	6	3.5	11	8.7	8	8.2	29	5.0
Other reason	24	12.7	18	10.6	14	11.0	15	15.5	71	12.2
Ambiguous	9	4.8	7	4.1	12	9.4	9	9.3	37	6.3
Total	189	100.0	170	100.0	127	100.0	97	100.0	583	100.0

Locale of Employment

Tables 2-11 through 2-13, showing clinical field of employment, employing agency, and position, were calculated on the basis of the 1,289 respondents who indicated that they were working in nursing. Respondents had been given a choice of checking medical, general, surgical, maternity, child, or psychiatric nursing or of specifying the special service, the non-nursing health field, or the other field in which they were working. The 30 respondents who indicated a health field and the 59 who listed a non-health field are excluded from Tables 2-11 through 2-13. The health field group included licensed practical nurses in occupations such as inhalation therapy or x-ray technician, medical secretary, or teacher of "handy-man arts" in a mental hospital. The non-health group were mainly in non-nursing positions in business or industry. These tables include 36 who gained licensure as registered nurses (see Table 2-9) after completing a practical nursing program. Throughout Tables 2-11, 2-12, and 2-13, the number of registered nurses is shown in parentheses next to the larger number in each category. The larger number includes the number of registered nurses, and it is on the basis of the larger number that percentages were calculated.

The clinical field of employment of all respondents who were working in nursing when they returned the fourth questionnaire is shown in Table 2-11. In each region, by far the largest proportion were engaged in a medical or general clinical area. This ranged from 32.7 percent in Region II to 47.3 percent in Region III. Apparently, combined medical-surgical units were more common in some regions than in others. In Region IV, 4.1 percent of those in nursing worked in such areas. The percentage was larger in Regions III and II and at a high of 10.1 percent in Region I. In each region, there was representation through the full variety of clinical fields, but the proportions in other than medical or surgical were small, being in no case as much as 9 percent. The registered nurses were

Table 2-11. Clinical Field of Employed Practical Nurses Five Years After Graduation, by Geographic Region of School

Clinical Field	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Medical or general	135 (4)*	36.9	112	32.7	190(1)	47.3	73	42.4	510 (5)	39.6
Surgical	30 (6)	8.2	32(1)	9.2	32	8.0	17	9.9	111 (7)	8.6
Medical-surgical	37	10.1	25(2)	7.2	18(1)	4.5	7	4.1	87 (3)	6.7
Maternity	20 (2)	5.5	22	6.3	22(1)	5.5	10	5.8	74 (3)	5.7
Pediatrics	23 (1)	6.3	16	4.6	13	3.2	3(1)	1.7	55 (2)	4.3
Psychiatry	17 (2)	4.6	11	3.2	16	4.0	2	1.2	46 (2)	3.6
Operating room and surgical specialties	21 (1)	5.7	16	4.6	16(1)	4.0	14	8.1	67 (2)	5.2
Acutely ill	17 (2)	4.6	17	4.9	9(1)	2.2	6(2)	3.5	49 (5)	3.8
Long-term illness	17	4.6	26	7.4	18(1)	4.5	9	5.2	70 (1)	5.4
Office specialties	18 (1)	4.9	30	8.6	32	8.0	8	4.7	88 (1)	6.8
Public health	3 (1)	0.8	5	1.4	3	0.7	3	1.7	14 (1)	1.1
Other special services	15 (2)	4.1	17(1)	4.9	13	3.2	12(1)	7.0	57 (4)	4.4
Combination--two services	12	3.3	18	5.2	14	3.5	8	4.7	52	4.0
No answer	1	0.3	2	0.6	6	1.5	0	0.0	9	0.7
Total	366(22)	100.0	349(4)	100.0	402(6)	100.0	172(4)	100.0	1,289(36)	100.0

*The numbers in parentheses represent the L.P.N.'s/L.V.N.'s who have gained R.N. licensure. The R.N.'s are included in the larger number.

scattered throughout the clinical fields. Moving from a comparison of individual regions to a consideration of the total group, the largest proportion, 39.6 percent, were in medical and/or general areas. Those who checked both medical and surgical made up 6.7 percent. If the 8.6 percent who checked surgical are added to the medical and the medical-surgical, it is seen that more half of those working in nursing are in these clinical fields. Maternity nursing was the working area of 5.7 percent, pediatrics 4.3 percent, and psychiatry 3.6 percent. Those specifying operating room and other surgical specialties such as orthopedics, gynecology, or plastic surgery constituted 5.2 percent. Respondents who wrote in such special areas as recovery room, coronary care, or cancer nursing, 3.8 percent of the total, were grouped together as "nursing the acutely ill." The 5.4 percent in the classification "long-term care" included those who wrote in phrases such as nursing home, chronic illness, or geriatric care. "Office specialties," with 6.8 percent, included those who specified that their nursing was done in the office of a doctor or dentist or of an organization such as Blue Cross or the health department of an industry. The smallest group was the 1.1 percent in public health. "Other special services," 4.4 percent, included 41 who checked medical specialties such as emergency room, rehabilitation, or cardiovascular nursing; 6 who specified some form of church-related nursing; 4 who were members of families which owned nursing homes; and 6 who indicated various other areas. Those who checked a combination of any two services made up 4 percent. Although apparently employed, a small minority, 0.7 percent, did not report their field of clinical practice.

The employing agency of respondents who had graduated from practical nursing programs five years earlier and who were working in nursing at the time of the fourth questionnaire is shown in Table 2-12. Region III's proportion of nurses employed by hospitals of one type or another was 66.9 percent as compared with a narrow range from 71.5 to 73.1 percent in the other three regions. Nursing homes employed from 7.5 percent in Region III to 10.7 percent in Region I. In proportion of practical nurses employed by private patients, Region III was higher, 7.7 percent, than the other regions. Nurses employed by a doctor or dentist ranged from 5.7 percent in Region I to more than 11 percent in Regions II and III. The small percentages in the other categories exhibited little regional difference. The registered nurses in each region were employed mainly in hospitals. In the total sample, hospitals were by far the most common employers of all respondents, accounting for 70.6 percent of the total. Nursing homes employed 8.8 percent, private patients 4.3 percent, and doctors or dentists 9.6 percent. Some private duty nurses responded as self-employed, but a few reported working for hospitals, which accounts for the slight difference in frequencies reported in Tables 2-12 and 2-13. One and nine-tenths percent were employed by public health agencies.

Table 2-12. Employer of Practical Nurses Five Years After Graduation, by Geographic Region of School

Employer	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Hospital	263(20)*	71.9	255(4)	73.1	269(5)	66.9	123(4)	71.5	910(33)	70.6
Nursing home	39	10.7	28	8.0	30	7.5	16	9.3	113	8.8
Private duty (self-employed)	17	4.6	6	1.7	31	7.7	2	1.2	56	4.3
Doctor or dentist	21	5.7	41	11.7	46	11.4	16	9.3	124	9.6
Public health agency	5 (1)	1.4	8	2.3	8	2.0	4	2.3	25 (1)	1.9
Other employer	13 (1)	3.6	6	1.7	11(1)	2.7	6	3.5	36 (2)	2.8
Two or more employers	8	2.2	5	1.4	5	1.2	5	2.9	23	1.8
No answer	0	0.0	0	0.0	2	0.5	0	0.0	2	0.2
Total	366(22)	100.0	349(4)	100.0	402(6)	100.0	172(4)	100.0	1,289(36)	100.0

*The numbers in parentheses represent the L.P.N.'s/L.V.N.'s who have gained R.N. licensure. The R.N.'s are included in the larger number.

Other types of employers, including clinics, schools for the retarded, rehabilitation centers, industry, the military, and other similar institutions, employed 2.8 percent. Those who checked two or more employers (one of which was usually a hospital) accounted for 1.8 percent, and those who gave no answer, 0.2 percent. Only 3 of the 36 registered nurses were employed by agencies other than hospitals.

Table 2-13 lists the positions held by the respondents who were working in nursing at the time they filled out the fourth questionnaire. Again Region III showed notable differences from the other regions in several categories. Positions as staff nurse were held by 61.7 percent of those in Region III, as compared with a range from 70.9 to 75.1 percent in the other regions. Combined staff and head nurse positions were held by 3 percent in Region III, as against a range from 1.1 to 1.7 percent in the others. Regions IV, II, and I had 1.2, 2, and 4.9 percent, respectively, in private duty, whereas Region III had 8.5 percent. Other differences among regions were that Region II had notably fewer in head nurse positions, 4.3 percent, as contrasted with a range from 7 to 7.7 percent in the other regions, and Region I had fewer as office nurses, 4.4 percent, as compared with from 8 to 10 percent in the other regions. Twenty of the 22 registered nurses in Region I, all 4 registered nurses in Region II, and 3 of the 4 registered nurses in Region IV were in staff nurse positions. In Region III, half of the 6 were staff nurses, whereas the other 3 were a head nurse, an anesthetist, and a consultant to an insurance company. Of the total group active in nursing, the majority, 70.3 percent, were in staff nurse positions. Office nurses constituted 7.8 percent, head nurses 6.5 percent, private duty nurses 4.7 percent, supervisors 1.3 percent, and 2.9 percent listed some other position. The latter included 12 licensed practical nurses who gave their positions as laboratory assistants, intravenous injection technicians, etc.; 6 in public health; and 4 administrators or assistant administrators. The remainder of those in the "other position" category were scattered by ones and twos through positions such as researchers, assistant head nurses, or team leaders. There were 1.9 percent who described themselves as holding a combination staff and head nurse position, and 3.4 percent who listed some other combination. The latter group included 36 who said one of the positions was staff nurse (the other frequently being medication nurse), 4 who combined head nurse with another position, 3 who combined private duty with some other responsibility, and 1 who worked for a doctor but described herself as a supervisor and researcher. Slightly over 1 percent gave no answer or an ambiguous

Table 2-13. Position of Practical Nurses Five Years After Graduation, by Geographic Region of School

Position	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Staff nurse	275(20)*	75.1	261(4)	74.8	248(3)	61.7	122(3)	70.9	906(30)	70.3
Staff and head nurse	4	1.1	6	1.7	12	3.0	3(1)	1.7	25 (1)	1.9
Head nurse	28 (1)	7.7	15	4.3	29(1)	7.2	12	7.0	84 (2)	6.5
Private duty	18	4.9	7	2.0	34	8.5	2	1.2	61	4.7
Supervisor	3 (1)	0.8	6	1.7	6(1)	1.5	2	1.2	17 (2)	1.3
Office nurse	16	4.4	28	8.0	40	10.0	16	9.3	100	7.8
Other position	6	1.6	9	2.6	14(1)	3.5	9	5.2	38 (1)	2.9
Combination of positions	11	3.0	16	4.6	12	3.0	5	2.9	44	3.4
No answer and ambiguous	5	1.4	1	0.3	7	1.7	1	0.6	14	1.1
Total	366(22)	100.0	349(4)	100.0	402(6)	100.0	172(4)	100.0	1,289(36)	100.0

*The numbers in parentheses represent the L.P.N.'s/L.V.N.'s who have gained R.N. licensure. The R.N.'s are included in the larger number.

response. Of the registered nurses, 30 were staff nurses, 1 combined staff and head nurse duties, 2 were head nurses, and 3 held other positions.

Employment History

Work Availability

All the respondents were asked to check Yes or No to the question, "Has employment been available whenever desired?" In Regions I and II, 89.9 and 90.9 percent had found work available, whereas in Regions III and IV, 81.9 and 82.2 percent had done so (Table 2-14). These differences are reversed in the "no answer" category, Regions III and IV having 11.7 and 12.6 percent and Regions I and II having 5.9 and 4.8 percent. Those who had not found work always available ranged from 3.3 percent in Region IV to 5.3 percent in Region III. Those for whom the availability of work was undeterminable were less than 2 percent in each region. In the total sample, 86.8 percent checked Yes, 4.2 percent No, 0.8 percent were undecided, and 8.2 percent gave no answer.

Table 2-14. Availability of Nursing Employment Since Graduation, by Geographic Region of School

Nursing Employment	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Available	499	89.9	472	90.9	433	81.9	221	82.2	1,625	86.8
Unavailable	21	3.8	20	3.9	28	5.3	9	3.3	78	4.2
Availability undetermined	2	0.4	2	0.4	6	1.1	5	1.9	15	0.8
No answer	33	5.9	25	4.8	62	11.7	34	12.6	154	8.2
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

Work availability concerns not only the question of whether work is available to the nurse but also whether the nurse is available for work. Participants were asked whether there had been periods of time since graduation when they were not employed as practical nurses. Because 86.8 percent indicated they felt work had been available when desired, it might be assumed that many of those who reported periods of unemployment (Table 2-15) did not work because of personal choice and not because they failed to find work. Regions I, II, and IV were quite

Table 2-15. Interruption in Employment Since Graduation, by Geographic Region of School

Employment Continuity	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Not interrupted	193	34.8	183	35.3	237	44.8	96	35.7	709	37.9
Interrupted	336	60.5	309	59.5	256	48.4	154	57.2	1,055	56.4
Ambiguous and no answer	26	4.7	27	5.2	36	6.8	19	7.1	108	5.8
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

similar in the percentage of respondents who had had such periods of time in the five years after graduation. Region III was divergent. Forty-four and eight-tenths percent in Region III, compared with 34.8 percent to 35.7 percent in other regions, indicated their employment in nursing had not been interrupted. Reporting one or more periods when they were not working were 48.4 percent in Region III, as against 57.2 to 60.5 percent in the other regions. There was little regional difference in the "ambiguous and no answer" category. The total group contained 56.4 percent who had had at least one period of time after graduation when they were not working, 37.9 percent who had had no such periods, and 5.8 percent who did not answer or gave ambiguous replies.

Those who replied that there had been periods of time after graduation during which they had not been working were asked to indicate the total duration of such periods. Table 2-16, excluding those who worked continuously and those who gave ambiguous or no answers, gives these data. Region IV had only 14.3 percent who had spent less than five months unemployed, Regions I and II each had approximately 19 percent, and Region III had 25.4 percent. In each of Regions I, III, and IV, about 21 percent had not worked for a total period of five months to one year, whereas Region II had 25.9 percent in this category. The category "over one year but less than two" had a little over 19 percent in Regions II, III, and IV, but 23.2 percent in Region I. Those not working for over two years but less than three ranged from 13.6 percent in Region II to 18.2 percent in Region IV. There were about 10 percent in each of Regions I, II, and III; and 14.9 percent in Region IV who had had their employment interrupted for more than three but less than four years. "Over four years" ranged from 5.1 percent in Region III to 11 percent in Region IV. The "ambiguous and no answer" category was less than 2 percent in each region, and 1.5 percent in the total sample. The proportions of the entire sample for each total duration of time not employed were: less than five months, 20 percent; five months to one year, 22.4 percent; one to two years, 20.6 percent; two to three years, 16 percent; three to four years, 11 percent; over four years, 8.5 percent.

Table 2-16. Total Time Not Employed Since Graduation,
by Geographic Region of School*

Total Time Not Employed	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than five months	66	19.6	58	18.8	65	25.4	22	14.3	211	20.0
Five months to one year	68	20.2	80	25.9	56	21.9	32	20.8	236	22.4
Over one year, less than two	78	23.2	60	19.4	49	19.1	30	19.5	217	20.6
Over two years, less than three	57	17.0	42	13.6	42	16.4	28	18.2	169	16.0
Over three years, less than four	35	10.4	31	10.0	27	10.5	23	14.9	116	11.0
Over four years	28	8.3	32	10.4	13	5.1	17	11.0	90	8.5
Ambiguous and no answer	4	1.2	6	1.9	4	1.6	2	1.3	16	1.5
Total	336	100.0	309	100.0	256	100.0	154	100.0	1,055	100.0

*Those who reported no periods of unemployment are excluded from this table.

Changes of Position

The number of states in which a nurse has worked gives a measure of her tendency to move about and sets the lower limit on how often she has changed her position. Table 2-17 shows that approximately three-fourths of the nurses in the study, from 71.7 percent in Region IV to 77.1 percent in Region II, had worked in only one state during the five years immediately following their graduation. From 10.4 percent in Region IV to 16.8 percent in Region I had worked in two states, and between 3 and 4 percent in each region had worked in three or more states.

Apparently, the majority in the "none, no answer, and ambiguous" category found the question unclear, because many who were employed responded with "none" as the number of states in which they had worked. This group ranged from 5 percent in Region II to 14.1 percent in Region IV, and was 7.6 percent of the total sample. Combining all regions shows that 74.6 percent had worked in one state, 14.2 percent in two, and 3.5 percent in three or more.

Table 2-17. Number of States in Which Employed as Practical Nurse Since Graduation, by Geographic Region of School

Number of States	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
One	411	74.1	400	77.1	393	74.3	193	71.7	1,397	74.6
Two	93	16.8	74	14.3	71	13.4	28	10.4	266	14.2
Three or more	21	3.8	19	3.7	16	3.0	10	3.7	66	3.5
None, no answer, and ambiguous	30	5.4	26	5.0	49	9.3	38	14.1	143	7.6
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

Obviously, practical nurses need not move to another state in order to change their position. To determine this latter statistic, respondents were asked how often they had changed position or type of work since graduation. The replies are shown in Table 2-18. The range, by region, of those who reported no change of position was only from 35.8 to 38.3 percent. Region III had the greatest proportion 21 percent, who had made only one change of position, whereas the other regions ranged from 16.6 to 18.2 percent. Regions I and II had a higher percentage than Regions III and IV in each of the more frequent change categories: two changes, 15.9 and 16 percent as against 14.4 and 13 percent; three changes, 14.1 percent for both Regions I and II as against 9.5 and 11.2 percent for Regions III and IV; and four or more changes, 8.1 and 8.7 percent for Regions I and II as against 5.7 and 4.8 percent for Regions III and IV. However, in percentage of "ambiguous and no answer," Regions III and IV were higher, showing 13 and 14.5 percent as compared with 7.7 and 8.8 percent in Regions II and I. For all regions

Table 2-18. Number of Changes of Position by Practical Nurses Since Graduation, by Geographic Region of School

Changes of Position	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
No change	203	36.6	186	35.8	193	36.5	103	38.3	685	36.6
One change	92	16.6	92	17.7	111	21.0	49	18.2	344	18.4
Two changes	88	15.9	83	16.0	76	14.4	35	13.0	282	15.1
Three changes	78	14.1	73	14.1	50	9.5	30	11.2	231	12.3
Four or more changes	45	8.1	45	8.7	30	5.7	13	4.8	133	7.1
Ambiguous and no answer	49	8.8	40	7.7	69	13.0	39	14.5	197	10.5
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

combined, 36.6 percent reported no change of position, 18.4 percent one change, 15.1 percent two changes, 12.3 percent three changes, and 7.1 percent four or more changes. There were 10.5 percent who gave no answer or an ambiguous answer.

The respondents were asked to give the one main reason for their most recent change of position. Table 2-19 displays the reasons stated by those who had changed position at least once. Only the first reason given was coded. The category "moved/inconvenient location" was least frequent in Region III, 10.9 percent, as compared with 18.1 percent in Region IV and 20.5 percent in Region I and in Region II. In each of Regions I, II, and IV this was the category containing the largest number of answers. "Economic advantages" was the largest category, 21 percent, in Region III; this is to be viewed in the light of 13.2 percent in Region I, 17.1 percent in Region II, and 17.3 percent in Region IV. Region IV was relatively high in the proportion of those giving reasons related to personal or professional progress, 4.7 percent, contrasted with a range of from 1 to 1.9 percent in the other regions. Reasons having to do with changes in clinical field ranged from 7.8 percent in Region II to 11 percent in Region IV, and those having to do with working conditions from 11.6 percent in Region I to 15 percent in Region III. A miscellaneous group of "personal and other" reasons accounted for a range of from 10.2 percent in Region II to 16.5 percent in Region I and included such statements as "to go back to school," "to open a store," "because of the hospital's need," and "injured at work." Those who gave no answer ranged from 13.2 percent in Region I to 20.6 percent in Region III. The other categories showed little regional difference. In the total sample of those who had made a position change, 17.6 percent quoted reasons of inconvenient location for changing their place of work and 17 percent gave reasons having to do with economic factors. Working conditions were cited by 13.4 percent as responsible for their position change and 12.7 percent listed personal and other reasons. The remaining categories all had lower proportions of the total: 9.4 percent for "different clinical field," 5.9 percent for "marriage/husband," 4.8 percent for opportunity for experience and learning on the job, 1.8 percent for "personal and professional progress," and 1.7 percent for "children/pregnancy."

Table 2-19. Main Reason for Most Recent Change of Position
by Practical Nurses, by Geographic Region of School*

Main Reason for Most Recent Change	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Moved/inconvenient location	62	20.5	60	20.5	29	10.9	23	18.1	174	17.6
Experience/learning	14	4.6	17	5.8	12	4.5	5	3.9	48	4.8
Economic advantages	40	13.2	50	17.1	56	21.0	22	17.3	168	17.0
Marriage/husband	20	6.6	22	7.5	10	3.7	6	4.7	58	5.9
Children/pregnancy	6	2.0	6	2.0	4	1.5	1	0.8	17	1.7
Personal and professional progress	4	1.3	3	1.0	5	1.9	6	4.7	18	1.8
Different clinical field	32	10.6	23	7.8	24	9.0	14	11.0	93	9.4
Working conditions	35	11.6	43	14.7	40	15.0	15	11.8	133	13.4
Personal and other	50	16.5	30	10.2	32	12.0	14	11.0	126	12.7
No answer	40	13.2	39	13.3	55	20.6	21	16.5	155	15.7
Total	303	100.0	293	100.0	267	100.0	127	100.0	990	100.0

*Only those who reported one or more changes of position are included in this table.

A decision to change position is influenced by the extent to which one's expectations regarding his work have been fulfilled. Respondents were asked to indicate whether each of three specific expectations had been met in the five years after their graduation. These expectations concerned the personal satisfaction to be gained in nursing, the working conditions to be encountered, and the salary to be earned. The replies are summarized in Table 2-20. The question concerned with personal satisfaction brought forth the greatest proportion of Yes responses, from 78.4 percent in Region IV to 88.2 percent in Region II. A low of 4.3 percent in Region III to a high of 9.3 percent in Region IV checked No. The undecided, who checked both Yes and No or who wrote in a comment, were 1.2 percent or less in each region. Those giving no answer ranged from 4.6 percent in Region II to 11.5 percent in Region IV. In the entire sample, 85.2 percent said their expectations regarding personal satisfaction had been met, 6.1 percent said they had not been met, 7.8 percent gave no answer, and 0.9 percent were undecided. The question regarding the extent to which expectations of working conditions had been met gained a less favorable response. The range of those who said Yes was from 55.3 percent in Region I to 65.9 percent in Region II. Answering No were 17.8 percent in Region IV to 29.5 percent in Region I. In each region the small proportion of "undecided"

Table 2-20. Extent to Which Expectations of Practical Nurses Were Met
Since Graduation, by Geographic Region of School

Meeting of Expectations Regarding:	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Personal satisfaction										
Yes	482	86.8	458	88.2	444	83.9	211	78.4	1,595	85.2
No	36	6.5	31	6.0	23	4.3	25	9.3	115	6.1
Undecided	4	0.7	6	1.2	4	0.8	2	0.7	16	0.9
No answer	33	5.9	24	4.6	58	11.0	31	11.5	146	7.8
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0
Working conditions										
Yes	307	55.3	342	65.9	297	56.1	168	62.5	1,114	59.5
No	164	29.5	117	22.5	129	24.4	48	17.8	458	24.5
Undecided	12	2.2	14	2.7	10	1.9	5	1.9	41	2.2
No answer	72	13.0	46	8.9	93	17.6	48	17.8	259	13.8
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0
Salary										
Yes	234	42.2	263	50.7	195	36.9	129	48.0	821	43.9
No	242	43.6	203	39.1	231	43.7	93	34.6	769	41.1
Undecided	5	0.9	12	2.3	12	2.3	6	2.2	35	1.9
No answer	74	13.3	41	7.9	91	17.2	41	15.2	247	13.2
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

was nearly constant. Those giving no answer ranged from 8.9 percent in Region II to 17.8 percent in Region IV. Combining all regions shows 59.5 percent said Yes, 24.5 percent No, 13.8 percent gave no answer, and 2.2 percent were undecided. The "no answer" group in each part of Table 2-20 includes 29 individuals who specified that they could not answer the questions about expectations because they had never worked as licensed practical nurses and 5 who said they had worked for too short a period to be able to answer.

Salary

The respondents were least satisfied with the financial aspect of their occupation; they were almost evenly divided in their opinion as to whether or not their expectations regarding salary had been met (Table 2-20). Those who said Yes ranged from 36.9 percent in Region III to 50.7 percent in Region II. Those checking No showed a range of from 34.6 percent in Region IV to 43.7 percent in Region III. The undecided showed little regional difference, and "no answer" ranged from 7.9 percent in Region II to 17.2 percent in Region III. Of the total group, 43.9 percent had had their salary expectations met, 41.1 percent had not, 13.2 percent gave no answer, and 1.9 percent were undecided.

In the questionnaire, the item eliciting information about actual income was: "If you have worked as an L.P.N. or L.V.N. during the past year, what was your approximate monthly salary before deductions?" Responses to this question were separated according to the employment status categories in Table 2-9. The data on salaries of practical nurses working full time (33 or more hours per week) are given in Table 2-21; those for practical nurses working part time (1 to 32 hours per week) in Table 2-22. The salaries of those employed in non-nursing fields and of those now licensed to practice as registered nurses are not shown.

The mode of the salary distribution for full-time work in practical nursing was in the $401 to $450 category

Table 2-21. Monthly Salary of Practical Nurses for Full-time Work Five Years After Graduation, by Geographic Region of School*

Monthly Salary	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
$0-$100	3	1.2	1	0.4	2	0.6	1	0.8	7	0.7
$101-$200	9	3.6	3	1.1	20	5.9	2	1.5	34	3.4
$201-$250	10	4.0	5	1.9	19	5.6	2	1.5	36	3.7
$251-$300	17	6.8	25	9.4	79	23.2	10	7.7	131	13.3
$301-$350	23	9.2	46	17.3	73	21.4	16	12.3	158	16.0
$351-$400	65	26.1	62	23.3	72	21.1	34	26.2	233	23.6
$401-$450	60	24.1	77	28.9	37	10.9	30	23.1	204	20.7
$451-$500	40	16.1	22	8.3	17	5.0	20	15.4	99	10.0
Over $500	15	6.0	16	6.0	10	2.9	8	6.2	49	5.0
Ambiguous and no answer	7	2.8	9	3.4	12	3.5	7	5.4	35	3.5
Total	249	100.0	266	100.0	341	100.0	130	100.0	986	100.0

*Includes only those working as practical nurses.

for Region II, in the $351 to $400 category for Regions I and IV, and in the $251 to $300 category for Region III (Table 2-21). In each of the four categories covering the interval from $101 to $350, Region III had the highest proportion of respondents; in each of the four categories covering the interval from $351 to over $500, the same region had the lowest proportion. In the $251 to $300 group were 6.8 percent of Region I, 7.7 percent of Region IV, 9.4 percent of Region II, and 23.2 percent of Region III. The range was wide also in the $301 to $350 category: from 9.2 percent in Region I to 21.4 percent in Region III. Incomes of $351 to $400 were from 21.1 percent in Region III to 26.2 percent in Region IV. The great divergence of Region III appeared again in the $401 to $450 group with 10.9 percent, whereas the others ranged from 23.1 percent in Region IV to 28.9 percent in Region II. The $451 to $500 category showed Regions III and II low with 5 and 8.3 percent, respectively, and Regions IV and I high with 15.4 and 16.1 percent. In Regions I, II, and IV, approximately 6 percent earned over $500 per month but only 2.9 percent of Region III did so. Only small proportions of each region gave no answer or an ambiguous answer. The proportions of the total sample earning each level of salary were: $0-$100, 0.7 percent; $101-$200, 3.4 percent; $201-$250, 3.7 percent; $251-$300, 13.3 percent; $301-$350, 16 percent; $351-$400, 23.6 percent; $401-$450, 20.7 percent; $451-$500, 10 percent; and over $500, 5 percent. Of those working full time in practical nursing, 3.5 percent gave uncodeable answers.

No apparent pattern among regions emerged in the table (2-22) showing salaries for respondents engaged in part-time practical nursing. Regions I and IV had their highest proportion in the $101-$200 category, 27.7 and 35.3 percent, respectively. The highest proportion in Region II was 21.3 percent. This was found in both the $101-$200 and the $201-$250 categories. Region III had its highest proportion, 16.7 percent, in each of three categories: $0-$100, $251-$300, and $301-$350. The lack of pattern may be due to the wide variation in number of hours worked per week, 1 to 32 hours all being classified as part time, and to possible discrepancies between the number of hours being worked at the time the questionnaire was filled out and the number on which the respondent based her estimate of average monthly salary during the past year. The entire sample showed these proportions of part-time workers earning each level of salary: $0-$100, 11 percent; $101-$200, 24.5 percent; $201-$250, 12.7

Table 2-22. Monthly Salary of Practical Nurses for Part-time Work Five Years After Graduation, by Geographic Region of School*

Monthly Salary	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
$0-$100	14	14.9	5	6.7	7	16.7	1	2.9	27	11.0
$101-$200	26	27.7	16	21.3	6	14.3	12	35.3	60	24.5
$201-$250	9	9.6	16	21.3	4	9.5	2	5.9	31	12.7
$251-$300	15	16.0	7	9.3	7	16.7	3	8.8	32	13.1
$301-$350	9	9.6	10	13.3	7	16.7	2	5.9	28	11.4
$351-$400	8	8.5	7	9.3	5	11.9	4	11.8	24	9.8
$401-$450	4	4.3	6	8.0	0	0.0	4	11.8	14	5.7
$451-$500	1	1.1	1	1.3	3	7.1	2	5.9	7	2.9
Over $500	1	1.1	2	2.7	0	0.0	1	2.9	4	1.6
Ambiguous and no answer	7	7.4	5	6.7	3	7.1	3	8.8	18	7.3
Total	94	100.0	75	100.0	42	100.0	34	100.0	245	100.0

*Includes only those working as practical nurses.

percent; $251-$300, 13.1 percent; $301-$350, 11.4 percent; $351-$400, 9.8 percent; $401-$450, 5.7 percent; $451-$500, 2.9 percent; and over $500, 1.6 percent. Over 7 percent gave no response.

Occupational and Community Involvement

Membership in organizations which are related to one's occupation is one means of estimating the degree of a person's commitment to his work. Table 2-23 shows the percentage of respondents who claimed membership in each of a number of organizations related to nursing and the percentage of those who did not report any membership. In Region I, 5.4 percent said they belonged to the National Federation of Licensed Practical Nurses (NFLPN) as compared with a range from 13.3 percent in Region II to 18 percent in Region III. The National Association for Practical Nurse Education and Service (NAPNES) had from 1 to 3 percent membership in individual regions. A range from 6.3 percent in Region IV to 14.1 percent in Region I checked that they were members of their nursing school alumni organizations. From 1 to 2 percent of the respondents in each region said they were members of the American Nurses' Association (ANA). Of the 28 individuals involved, 10 were former licensed practical nurses who had acquired registered nurse licensure, 6 of them in Region I. Region III had 9.5 percent who belonged to the National League for Nursing (NLN), whereas the other regions ranged from 3.5 to 5.2 percent. There were 7.1 percent or less in each region who claimed membership in various nursing groups with specific geographic or religious identifications. These were classified together as "other nursing-related organizations." "Other health organizations" included such groups as the American Heart Association, a state hospital association, the American Association of Inhalation Therapists, and a medical assistants' association. All these grouped together had less than 3 percent membership in each region. Those who did not report membership in any organization related to nursing ranged from 64.3 percent in Region III to 72.8 percent in Region I. Of the total sample, 12.5 percent belonged to the NFLPN, 10.9 percent to nursing school alumni, 5.7 percent to the NLN, 3.9 percent to other nursing-related groups, 1.8 percent to NAPNES, 1.5 percent to the ANA, and 1.1 percent to other health organizations. There were 68.8 percent who did not report membership in any nursing-related group.

Table 2-23. Organizational Membership of Practical Nurses Five Years After Graduation, by Geographic Region of School*

Organizational Membership	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
NFLPN	30	5.4	69	13.3	95	18.0	40	14.9	234	12.5
Nursing school alumni	78	14.1	64	12.3	45	8.5	17	6.3	204	10.9
ANA	9	1.6	8	1.5	6	1.1	5	1.9	28	1.5
NLN	25	4.5	18	3.5	50	9.5	14	5.2	107	5.7
NAPNES only	11	2.0	4	0.8	4	0.8	3	1.1	22	1.2
Combination including NAPNES	2	0.4	1	0.2	3	0.6	5	1.9	11	0.6
Total NAPNES	13	2.3	5	1.0	7	1.3	8	3.0	33	1.8
Other nursing-related organizations	8	1.4	19	3.7	27	5.1	19	7.1	73	3.9
Other health organizations	2	0.4	5	1.0	6	1.1	7	2.6	20	1.1
None	404	72.8	363	69.9	340	64.3	181	67.3	1,288	68.8

*Nurses with multiple membership are included more than once. Percentages relate to the total number of respondents.

To gain an estimate of the degree of community involvement of the respondents as nurse-citizens, they were asked to specify the health-related community activities in which they had participated during the previous year. Percentages differed little among regions (Table 2-24). Of the total sample, 90.1 percent answered "none" or gave no answer or an ambiguous one. Among all the respondents, there were 6 percent who were involved in a "direct health" activity. This category included such activities as helping with a bloodmobile, civil defense, the Red Cross, Planned Parenthood, a prenatal clinic, eye testing, etc. Almost 4 percent, involved in money-raising drives, in preventive immunizations, or in school or church sponsored health programs, are included in the "other" category. The degree of involvement of this sample in health-related community activities, as in nursing organizations, is small.

Table 2-24. Health-related Community Activity of Practical Nurses
Five Years After Graduation, by Geographic Region of School

Community Activity	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Direct health	23	4.1	46	8.9	27	5.1	16	5.9	112	6.0
Other	24	4.3	16	3.1	22	4.2	11	4.1	73	3.9
None, no answer, and ambiguous	508	91.5	457	88.1	480	90.7	242	90.0	1,687	90.1
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

The overwhelming majority of respondents were licensed to engage in practical nursing (Table 2-25). From 81 percent in Region IV to 88.4 percent in Region II were licensed as practical nurses in the state in which they had graduated from a nursing program. Some of these were also licensed in an additional state or states. Those who were licensed only in a state or states other than the one in which their practical nursing school was located were approximately 4 percent in each region. Ranging from 0.8 percent in Region II to 4.7 percent in Region I were those who had gained licensure as registered nurses. A small group in each region stated that they had never had any nursing license. From 4.9 percent in Region I to 11.9 percent in Region IV were included in the "no answer or ambiguous" category. Some of these probably had been licensed but their responses were not complete enough to categorize. Others left the item blank. In the total sample, 86.8 percent held practical nurse licenses in the state

Table 2-25. Licensure Five Years After Graduation,
by Geographic Region of School

Licensure	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Licensed/state of P.N. school graduation	482	86.8	459	88.4	465	87.9	218	81.0	1,624	86.8
Licensed/other state or states	19	3.4	21	4.0	19	3.6	11	4.1	70	3.7
Never licensed	1	0.2	3	0.6	6	1.1	4	1.5	14	0.7
Licensed as registered nurse	26	4.7	4	0.8	7	1.3	4	1.5	41	2.2
No answer or ambiguous	27	4.9	32	6.2	32	6.0	32	11.9	123	6.6
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

of their home school, 3.7 percent held such a license only in another state or states, and 2.2 percent held registered nurse licenses. Combining these three categories shows that 92.7 percent held some type of nursing license. Never licensed were 0.7 percent of the entire sample, and responding with no answer or an ambiguous answer were 6.6 percent.

Entering a program leading to licensure as a registered nurse is one avenue open to practical nurses who desire to advance their education. Regions II, III, IV and I had, respectively, 3.5, 5.5, 7.8, and 12.8 percent of respondents who had done so within the five-year period after their graduation from practical nursing school (Table 2-26). The latter percentage represents 71 individuals in Region I, as compared with no more than 29 in any other one region. In the total sample there were 139 persons, or 7.4 percent, who had attended a registered nurse program. Clearly stating they had not attended such a program were 82.6 percent, and giving no answer or an ambiguous answer were 9.9 percent.

Table 2-26. Enrollment Since Graduation in a Program Leading to R.N. Licensure, by Geographic Region of Practical Nursing School

Enrollment in R.N. Program	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Enrolled	71	12.8	18	3.5	29	5.5	21	7.8	139	7.4
Not enrolled	442	79.6	457	88.1	428	80.9	220	81.8	1,547	82.6
Ambiguous and no answer	42	7.6	44	8.5	72	13.6	28	10.4	186	9.9
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

For those who entered registered nurse programs, Table 2-27 shows the type of program selected, the progress of the student in the program, and the extent of the attainment of the goal of registered nurse licensure. Because discussion of percentages would be misleading, considering the small frequencies involved in each region, this table is first described by number of individuals. Selecting associate degree programs were 13 persons in Region II, 16 in Region IV, 20 in Region III, and 49 in Region I. Choosing diploma programs were 1 person in Region IV, 4 in Region II, 7 in Region III, and 18 in Region I. Baccalaureate programs were attended by no more than one respondent in each region. Four or fewer individuals in each region did not identify the type of registered nurse program they attended. In Region I, at the time they filled out the fourth questionnaire, 29 respondents had graduated from registered nurse programs and 12 were currently enrolled. For Region II, it was 4 persons graduated and 3 enrolled; for Region III, 7 graduated and another 7 enrolled; and for Region IV, 6 graduated and 5 enrolled. The "unknown and other" category undoubtedly included some respondents who had dropped out of one of the programs, some who were still enrolled, and perhaps a few who neglected to indicate that they had already graduated. This category had 10 respondents in Region IV, 11 in Region II, 15 in Region III, and 30 in Region I. Of the 18 persons in Region II and the 21 in Region IV who had entered registered nurse schools, 4 in each region had gained licensure at this level. In Region III, 7 of 29, and in Region I, 26 of 71 were licensed as registered nurses. In the total group of those who had been admitted to registered nurse schools, 69.5 percent had choosen associate degree programs, 21.3 percent had selected diploma programs, and 2.1 percent had decided on baccalaureate programs. There were 7.1 percent who did not identify the program they had entered. Of all the entrants, 33.1 percent had graduated, 19.4 percent were still enrolled, and 47.5 percent gave unclear answers. Finally, of the 139 individuals who entered registered nurse programs, 29.5 percent or 41 persons held registered nurse licenses. These were the same 41 in the category "licensed as registered nurse" of Table 2-25. Of these 41, 36 were actively engaged in nursing (see "registered nurse" category of Table 2-9 and the inclusion of registered nurses in Tables 2-11 through 2-13).

Besides entering a registered nurse program, another avenue of educational advancement to practical nurses is to participate in workshops, short-term courses, or programs of academic study. The pertinent item on the questionnaire was, "Have you taken any courses to improve your practical nursing skills (other than those given on the job)? If yes, describe." There were 16.4 percent of all respondents in Region III, 18.4 percent in Region I, 22.4 percent in Region II, and 22.7 percent in Region IV who said they had taken such courses (Table 2-28). Of the

Table 2-27. Type of Registered Nurse Program Attended, Progress in Program, and R.N. Licensure of Practical Nurses Since Graduation, by Geographic Region of Practical Nursing School*

R.N. Program	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Type attended										
Associate degree program	49	68.1	13	72.2	20	66.7	16	76.2	98	69.5
Diploma program	18	25.0	4	22.2	7	23.3	1	4.8	30	21.3
Baccalaureate program	1	1.4	0	0.0	1	3.3	1	4.8	3	2.1
Program unidentified	4	5.6	1	5.6	2	6.7	3	14.3	10	7.1
Total	72**	100.0	18	100.0	30**	100.0	21	100.0	141**	100.0
Progress in program										
Graduated	29	40.8	4	22.2	7	24.1	6	28.6	46	33.1
Now enrolled	12	16.9	3	16.7	7	24.1	5	23.8	27	19.4
Unknown and other	30	42.3	11	61.1	15	51.7	10	47.6	66	47.5
Total	71	100.0	18	100.0	29	100.0	21	100.0	139	100.0
R.N. licensure attained										
Yes	26	36.6	4	22.2	7	24.1	4	19.0	41	29.5
No and ambiguous	45	63.4	14	77.8	22	75.9	17	81.0	98	70.5
Total	71	100.0	18	100.0	29	100.0	21	100.0	139	100.0

*Only those who attended an R.N. program after their graduation as practical nurses are included in this table.
**In both Region I and Region III one student attended two types of programs.

Table 2-28. Additional Study by Practical Nurses Since Graduation, by Geographic Region of Practical Nursing School*

Additional Study	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	102	18.4	116	22.4	87	16.4	61	22.7	366	19.6
No	395	71.2	376	72.4	388	73.3	183	68.0	1,342	71.7
No answer	58	10.5	27	5.2	54	10.2	25	9.3	164	8.8
Total	555	100.0	519	100.0	529	100.0	269	100.0	1,872	100.0

*Includes study other than registered nurse education.

total sample, 19.6 percent said they had taken courses and 71.7 percent said they had not. A few of those who answered No volunteered the additional information that no courses were available to them. Almost 9 percent gave no answer.

The majority of the 366 individuals who had taken courses had studied nursing or directly related subjects (Table 2-29). This proportion ranged from 63.2 percent in Region III to 83.6 percent in Region IV. Courses in medical, biological, or social sciences were 8.6 percent in Region II, but within a range from 12.6 to 14.8 percent in Regions III, I, and IV. "Other subjects" accounted for less than 7 percent in each region. "Ambiguous or no answer" ranged from 1.6 percent in Region IV to 17.2 percent in Region III and accounted for 7.7 percent of the total group. Of all those who took courses, 76.5 percent specified they had studied nursing subjects, 12.3 percent medical, biological, or social sciences, and 3.6 percent other subjects.

Table 2-29. Courses Taken by Practical Nurses Since Graduation, by Geographic Region of Practical Nursing School*

Nature of Courses	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Nursing and related subjects	78	76.5	96	82.8	55	63.2	51	83.6	280	76.5
Medical, biological or social sciences	15	14.7	10	8.6	11	12.6	9	14.8	45	12.3
Other subjects	4	3.9	3	2.6	6	6.9	0	0.0	13	3.6
Ambiguous and no answer	5	4.9	7	6.0	15	17.2	1	1.6	28	7.7
Total	102	100.0	116	100.0	87	100.0	61	100.0	366	100.0

*Table includes only those who have taken courses other than in registered nurse programs.

Table 2-30. Nursing Courses Taken by Practical Nurses Since Graduation, by Geographic Region of Practical Nursing School*

Nursing Courses	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Medications	40	51.3	54	56.3	26	47.3	22	43.1	142	50.7
Combination which includes medications	3	3.8	11	11.5	3	5.5	4	7.8	21	7.5
Medical nursing or medical nursing specialty	14	17.9	12	12.5	13	23.6	16	31.4	55	19.6
Surgical nursing, operating room, or surgical specialty	7	9.0	7	7.3	4	7.3	1	2.0	19	6.8
Other or other combination	14	17.9	12	12.5	9	16.4	8	15.7	43	15.4
Total	78	100.0	96	100.0	55	100.0	51	100.0	280	100.0

*Table includes only respondents who have taken nursing courses other than in registered nurse programs.

Most of the 280 respondents whose studies were in nursing areas took courses in the administration of medications (Table 2-30). The range was from 43.1 percent in Region IV to 56.3 percent in Region II. An additional group, ranging from 3.8 percent in Region I to 11.5 percent in Region II, took a combination of courses, one of which was on medications. Medical nursing or a medical nursing specialty was the area of study for 12.5 percent in Region II, 17.9 percent in Region I, 23.6 percent in Region III, and 31.4 percent in Region IV. Surgical nursing, operating room, or a surgical specialty claimed the attention of 2 percent in Region IV, and from 7.3 to 9 percent in Regions I, II, and III. Other nursing courses or other combinations of courses ranged from 12.5 percent in Region II to 17.9 percent in Region I. In the total group of those who studied a nursing subject, 50.7 percent took courses in medications, 7.5 percent in some other area combined with medications, 19.6 percent in the medical nursing area, 6.8 percent in a type of surgical nursing, and 15.4 percent studied some other course or combination of courses.

The respondents were asked how they had financed their further study. Table 2-31 summarizes the answers of those who reported that they had undertaken individual courses, registered nurse programs, or both. A range of from 14 percent in Region III to 27.3 percent in Region IV had paid for their study with their own or their family's savings. A range of from 13 percent in Region II to 27.3 percent in Region IV had done it with money earned while they studied. A combination of savings and earnings was the method of 4 percent in Region III, of 7.8 percent in Region IV, of 13.7 percent in Region II, and of 18.5 percent in Region I. A scholarship alone or complemented by savings and/or earnings was the financing method of one person in Region II, but in the other regions the range was from 5.2 to 7 percent. Various other methods of meeting expenses were used by 3.8 and 6.5 percent in Regions I and IV and by 11 and 12.2 percent in Regions III and II. Region IV contained 15.6 percent who said that the courses they had studied had been free of charge. The range in the other regions was from 21 percent in Region I to 24 percent in Region III. From 10.4 percent in Region IV to 17.6 percent in Region II failed to answer the question on financing further study. Of the total sample of those who had sought further education after graduation from a practical nurse program, almost 20 percent had used savings to finance their studies and nearly the same proportion had used earnings. Combining savings and earnings were another 12.3 percent. Various arrangements, each including a scholarship, were used by 4.7 percent. There were 8.2 percent who had used other sources, 21.1 percent who reported no charge, and 15.3 percent who did not answer.

Table 2-31. Method of Financing Education Since Graduation, by Geographic Region of School*

Financing Method	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
Savings	28	17.8	27	20.6	14	14.0	21	27.3	90	19.4
Earnings	27	17.2	17	13.0	24	24.0	21	27.3	89	19.1
Savings and earnings	29	18.5	18	13.7	4	4.0	6	7.8	57	12.3
Scholarship alone or combined	11	7.0	1	0.8	6	6.0	4	5.2	22	4.7
Other method	6	3.8	16	12.2	11	11.0	5	6.5	38	8.2
No charge	33	21.0	29	22.1	24	24.0	12	15.6	98	21.1
No answer	23	14.6	23	17.6	17	17.0	8	10.4	71	15.3
Total	157	100.0	131	100.0	100	100.0	77	100.0	465	100.0

*Includes those with additional education after graduation from practical nursing program.

Summary

Nearly three-fourths of all practical nurses who completed the fourth questionnaire said they were currently married. Of the non-single group, nearly half had been married after their graduation from the practical nursing program. More than half of the currently or formerly married had either one or two children. A quarter of the same group had spouses in skilled trades, and another quarter were married to persons in sales and clerical jobs or to semiskilled or unskilled laborers. Of the spouses of respondents, nearly three-fourths were employed by others, two-fifths were assigned social index four, and nearly two-fifths had had 12 years of education.

More than half of all those who responded to the fourth questionnaire were employed full time (i.e., 33 or more hours per week) as licensed practical nurses. One-fourth were not engaged in paid employment. Of those who were not working in nursing, over half said it was for family and personal reasons. More than 50 percent of those employed in nursing worked in medical and/or surgical areas, and approximately 70 percent held staff nurse positions in hospitals.

The five-year employment history of the respondents reveals that work had been available to nearly 87 percent of them whenever desired. Either by work being unavailable or by their being unavailable to work, more than 56 percent of the respondents had had at least one period of time during which they were not employed. Of the group who did have such a period, the total duration of unemployment for more than 60 percent was less than two years. Nearly three-fourths of the total sample had been employed in at least one, and only one, state since their graduation from a practical nursing program. More than a third of them had not changed their position during that time and another sixth had changed only once. Of those who had changed position, approximately 17 percent made the most recent change for reasons of convenience of location. Almost as many did so for the sake of economic advantages. The approximate proportions of respondents reporting that nursing had met certain of their expectations were: 85 percent for personal satisfaction, 60 percent for working conditions, and 44 percent for salary. Reporting an amount between $351 and $450 as their average monthly salary during the preceding year were about 44 percent of the licensed practical or vocational nurses engaged in full-time nursing. One-quarter of those nursing part time reported $101 to $200 per month during this period. The degree of involvement of the respondents in nursing organizations is low, the 12.5 percent who stated that they were members of the National Federation of Licensed Practical Nurses being the largest group in any one organization. Nearly 70 percent of the total sample did not report membership in any organization related to the health field. Only 10 percent reported that they had been engaged in any health-related community activities during the past year.

At least 92 percent of the respondents were licensed as practical, vocational, or registered nurses. There were 139 individuals, 7.4 percent of the total sample, who had entered programs leading to registered nurse licensure. The associate degree program was the most frequent choice of the participants continuing their nursing education. About a third of all those who had entered registered nurse programs had already graduated, and another 20 percent stated that they were currently enrolled. Forty-one individuals, nearly 30 percent of the total 139, had attained registered nurse licensure. Of the entire group of respondents, 19.6 percent had taken courses, other than registered nurse programs, to improve their skills. More than 75 percent of those who took courses chose nursing subjects. Of those who selected nursing, nearly 60 percent included medications among their studies and about 20 percent chose medical nursing or its specialties. In reporting methods of financing further education, half said they had used their savings and/or earnings, not quite 5 percent had had scholarship aid, and 20 percent had taken courses for which there was no charge.

The foregoing is a description of the entire sample of practical nurses five years after graduation. Data imply that there are some regional differences; that is, items for which regional proportions, on inspection, appeared different from the total sample. (Statistically significant interrelationships are discussed in Chapter III.) Geographic region of the country, as used in this study, refers to the location of the practical nursing school which participants had attended.

The highest proportion of respondents remaining single five years after graduation were in Region I. Region I participants, if married, were more likely to have married after graduation and have no children or one child than respondents in other locations. The proportion of part-time L.P.N./L.V.N.'s, the proportion currently not working, and the group reporting interruptions in employment during the first five years after graduation were highest in Region I. The number of practical nurses who attended registered nurse programs was greatest in Region I.

Region III had the highest proportion of respondents who had been married before graduation and more respondents in this region reported having four or more children than did those in the other regions. The highest proportion employed as full-time L.P.N./L.V.N.'s were in Region III, as were the highest proportion reporting nonhealth employment. Among those giving reasons for their non-employment in nursing, Region III participants had the highest proportion who reported that they could earn more at other work. A higher proportion of participants in

Region III changed positions because of economic reasons than did respondents in other parts of the country. Continuity in employment among Region III participants appears to be greater than among respondents in other regions since the highest proportion reporting that employment had not been interrupted were in Region III.

Salaries for full-time employment in practical nursing differed among the regions. The highest proportions earning $351 a month or more were in Regions I and IV and the lowest proportion in this salary range was in Region III.

CHAPTER III

EMPLOYMENT PATTERNS, VARIABLES RELATED TO WORKING, AND OTHER FACTORS

In this five-year follow-up of practical nursing graduates, the main areas of interest are the contribution of this group to the health labor force and the relationships of individual characteristics with this contribution. Responses elicited from the questionnaire have been described in the previous chapter; in this chapter, interrelationships between descriptive variables are presented.

Practically all the responses on the initial questionnaire and some selected items from the second and third questionnaires were examined statistically with items from the fourth questionnaire. Relationships which were determined to be significant are those reported. In determining significance, the statistical test ordinarily computed was the chi-square. The probability level of .001 was the criterion of significance. For relationships between continuous variables, the Pearsonian r was computed and .001 set as the level of significance.

With questionnaire studies, there is always the possibility of data bias due to non-response. The degree and nature of the bias cannot be determined. In the five-year follow-up, males, the formerly married, and non-white populations may be underrepresented. Appendix A describes responses of these groups. Since these three groups have always been small proportions of the total number, any bias introduced is of relatively minor concern in data referring to the total sample.

For the purposes of most of the analysis presented herein, only the respondents who graduated from the practical nursing program and who returned the questionnaires and responded to the items designated in the titles of the tables are included. Therefore, all respondents who had completed the registered nurse program and who identified themselves as registered nurses five years after graduation are eliminated from the tables giving interrelationships referring only to practical nurses. The category "not working" which appears in the tables refers to respondents who apparently continue to identify themselves as practical nurses but who were not working five years after graduation.

Working Status

Working status of practical nurses one year after graduation was compared with working status five years after graduation (Table 3-1). It appears that practical nurses, once having entered the health labor force, have a

Table 3-1. Working Status of Practical Nurses Five Years After Graduation, by Working Status One Year After Graduation*

One Year After Graduation	Five Years After Graduation							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
Full time	842	65.5	145	11.3	298	23.2	1,285	100.0
Part time	46	34.3	49	36.6	39	29.1	134	100.0
Not working	58	28.9	32	15.9	111	55.2	201	100.0
Total	946	58.4	226	14.0	448	27.7	1,620	100.0

*Table excludes all in non-nursing positions, registered nurses, and those who did not respond to one or both of the above items.

Table 3-2. Age at Entrance and Marital Status of Practical Nurses at Entrance, One, and Five Years After Graduation*

Age at Entrance	At Entrance							
	Single		Married		Formerly Married		Total	
	No.	%	No.	%	No.	%	No.	%
14-19	789	97.2	16	2.0	7	0.9	812	100.0
20-29	160	44.9	151	42.4	45	12.6	356	100.0
30-44	21	5.1	335	81.3	56	13.6	412	100.0
45 and over	7	3.7	135	71.1	48	25.3	190	100.0
Total	977	55.2	637	36.0	156	8.8	1,770	100.0
Age at Entrance	One Year After Graduation							
14-19	497	63.4	279	35.6	8	1.0	784	100.0
20-29	100	29.9	193	57.8	41	12.3	334	100.0
30-44	15	3.7	327	81.1	61	15.1	403	100.0
45 and over	6	3.2	132	69.8	51	27.0	189	100.0
Total	618	36.1	931	54.4	161	9.4	1,710	100.0
Age at Entrance	Five Years After Graduation							
14-19	166	20.6	611	75.7	30	3.7	807	100.0
20-29	51	14.7	251	72.3	45	13.0	347	100.0
30-44	14	3.4	322	79.3	70	17.2	406	100.0
45 and over	7	3.7	131	69.3	51	27.0	189	100.0
Total	238	13.6	1,315	75.2	196	11.2	1,749	100.0

*Table excludes all who did not graduate, all in non-nursing positions, registered nurses, and all who did not respond to one or more of the above items.

tendency to continue working for at least five years. There were 842 participants, or 65.5 percent, who were employed full time both one and five years after graduation. Of those doing part-time work five years after graduation, 49, or 36.6 percent, had been doing part-time work one year after graduation. Of those not working five years after graduation, over half, 55.2 percent, had not been working one year after graduation. It could be assumed, therefore, that both working status and the amount of time employed per week had remained stable for the majority of respondents. Among those whose work status was different at the times being studied, 145 who had been working full time one year after graduation had changed to part-time work, and 298, or 23.2 percent, had stopped working. About a third of those working part time one year after graduation had changed to full-time work, and 29.1 percent were no longer working. An addition of 90 to the group currently working came from those who had not been working one year after graduation; 58 were employed full time and 32 part time. In light of this finding, it is to be expected that many of the relationships reported here are similar to those reported as being significant one year after graduation.[1]

Age, Marital Status, and Working Status

Since age and marital status are statistically related in the general population, it naturally follows that they would also be related at all phases of this study (Table 3-2). As will be shown, marital status was also statistically related to working status for both one and five years after graduation. At the time of entering the practical nursing program, those of the youngest group, 14-19 years old, were predominantly single, 97.2 percent, one year after graduation 63.4 percent were single, and five years after graduation only 20.6 percent were single. Conversely, 2 percent of the youngest group were married upon entrance, and 35.6 and 75.7 percent one and five years after graduation. (Because of a difference in coding procedures, the table for entering students includes the 28 men remaining in the study five years after graduation. At entrance, 5 men were 19 or younger, 15 were 20-29, 7 were over 30, and 1 did not give his age.)

From the time of entrance to five years after graduation, there was a similar but smaller shift in the group 20-29 years old from 44.9 percent single to 14.7 percent and 42.4 percent married to 72.3 percent. Of those 45 and over, the change appears to be from married to formerly married although not significant in size; only 1.8 percent less married and 1.7 percent more formerly married. Some degree of change in frequencies in the divisions of Table 3-2 may be attributed to a missing response to a question, to a questionnaire not returned one year after graduation, or to a respondent who reported having been married or formerly married on a subsequent questionnaire stating she was single.

Age and marital status appear to have a direct bearing on the participants' work life in nursing. Table 3-3 indicates the relationship between age and working status five years after graduation. Those who were 25 or over when they entered practical nursing school were most likely to be working full time five years after graduation. Among these age groups, the percent working full time ranged from 69.6 to 73.3 percent as compared to 57.6 percent for all age groups. Among the three youngest groups, participation in the work force is less. For those under 25, those not working in each age group ranged from 30.7 percent to 39.4 percent as compared to 27.9 percent for all age groups. A low of 13.9 percent not currently working occurred in the 35-44 age group. The highest proportion of part-time workers, 17.6 percent, was found among the youngest group to enter practical nursing, 14-17, and the lowest, 9.9 percent, were 30-34 upon entrance as compared to 14.4 percent for the total group.

Not only age, but marital status at the time of entrance to the practical nursing program, time the marriage occurred, and marital status five years after graduation were all related to work status. Table 3-4 indicates that of the three classifications for marital status, those who were widowed, separated, or divorced when they entered practical nursing had the highest proportion working full time five years after graduation, 70.5 percent. For those who entered the program married, 69.7 percent were working full time five years after graduation and of those who were single at entrance, only 48.3 percent were employed full time five years after graduation. The non-working group was the converse of this, ranging from 15.4 percent of the formerly married to 36.9 percent of the single. There was no significant variation in the proportions working part time.

Since a great proportion of those who entered the program single had since married, time of marriage was analyzed in relation to working status and proved to be statistically significant (Table 3-5). Of the group who had

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[1] Barbara L. Tate and Lucille Knopf. Nurse Career-pattern Study. Part I: Practical Nursing Programs. National League for Nursing, New York, 1968, Chap. VIII.

Table 3-3. Working Status of Practical Nurses Five Years After Graduation, by Age at Time of Entrance to Practical Nursing Program*

Age at Entrance	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
14-17	72	45.3	28	17.6	59	37.1	159	100.0
18-19	274	44.8	97	15.8	241	39.4	612	100.0
20-24	124	57.7	25	11.6	66	30.7	215	100.0
25-29	86	71.7	16	13.3	18	15.0	120	100.0
30-34	81	73.0	11	9.9	19	17.1	111	100.0
35-44	200	73.3	35	12.8	38	13.9	273	100.0
45 and over	126	69.6	29	16.0	26	14.4	181	100.0
Total	963	57.6	241	14.4	467	27.9	1,671	100.0

*Table excludes all in non-nursing positions, registered nurses, and those who did not respond to one or both of the above items.

Table 3-4. Working Status of Practical Nurses Five Years After Graduation, by Marital Status at Time of Entrance to Practical Nursing Program*

Marital Status at Entrance	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
Single	453	48.3	138	14.7	346	36.9	937	100.0
Married	416	69.7	81	13.6	100	16.8	597	100.0
Formerly married	105	70.5	21	14.1	23	15.4	149	100.0
Total	974	57.9	240	14.3	469	27.9	1,683	100.0

*Table excludes all in non-nursing positions, registered nurses, religious sisters or brothers, and those who did not respond to one or both of the above items.

married after their graduation from practical nursing school, only 40 percent were employed full time five years after graduation, whereas of those married before graduation, almost two-thirds, 65.8 percent, were working full time. It is apparent that the younger group of practical nurses, having changed their marital status, usually from single to married, were less likely to be working full time five years after graduation than were those who had entered the program when they were older and married or formerly married.

Table 3-5. For Married and Formerly Married Female Practical Nurses, Working Status Five Years After Graduation, by Time of Marriage*

Time of Marriage	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
After graduation	293	40.0	125	17.1	315	43.0	733	100.0
Before graduation	415	65.8	93	14.7	123	19.5	631	100.0
Total	708	51.9	218	16.0	438	32.1	1,364	100.0

*Table excludes all in non-nursing positions, registered nurses, all single, male, religious sisters or brothers, and those who did not respond to one or both of the above items.

Table 3-6 gives further detail concerning the current marital and employment status of the female respondents. Of the group remaining single five years after graduation, 71.3 percent were full-time and 5.4 percent part-time practical nurses; for those who were married five years after graduation, 47 percent and 15.5 percent were working full and part time; and of those who reported themselves to have been formerly married, 77.7 percent were employed full time and 9.1 percent part time.

Table 3-6. Marital and Employment Status of Women Five Years After Graduation*

Employment Status	Marital Status							
	Single		Married		Formerly Married		Total	
	No.	%	No.	%	No.	%	No.	%
Full-time L.P.N./L.V.N.	186	71.3	630	47.0	153	77.7	969	53.9
Part-time L.P.N./L.V.N.	14	5.4	208	15.5	18	9.1	240	13.3
Not working	23	8.8	438	32.7	14	7.1	475	26.4
Registered nurse	22	8.4	12	0.9	2	1.0	36	2.0
Health-related work	6	2.3	15	1.1	3	1.5	24	1.3
Non-health work	10	3.8	37	2.8	7	3.6	54	3.0
Total	261	100.0	1,340	100.0	197	100.0	1,798	100.0

*Table excludes all males, religious sisters or brothers, and those who did not respond to one or both of the above items.

In studying the nursing careers of practical nurses over a period of time, it is obvious that the factors of age, marital status, and change of marital status are of paramount consideration. It is also apparent that there are several groups represented in this sample: the younger girls who marry and whose work patterns may greatly vary; married women, often over 30, who may work full or part time; and those, also older women, who previously had been married, who will probably be working full time. Since all three groups were represented among the students who entered the practical nursing schools, if an understanding of their eventual contribution to the health labor force is to be achieved, it becomes important to define practical nurses not only by their occupational preparation but also by their age and marital status.

Number of Children and Working Status

A statistical relationship was established between working status and number of children reported by female respondents (Table 3-7). Those women at either end of the distribution: those with no children and four or more children were employed full time more frequently than women with one, two, or three children. Of those with no children, 69.7 percent were working full time, and those with four and five or more children, 65.8 and 72.4 percent were working full time. For those with one, two, or three children, proportions were quite similar: not working ranged from 30.3 percent to 37.6 percent; those employed part time ranged from 17.1 percent to 18.6 percent; and those employed full time were from 44.7 percent to 52.6 percent.

Table 3-7. For *Married and Formerly Married Female Practical Nurses, Working Status and Number of Children Five Years After Graduation**

Number of Children	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
No children	131	69.7	19	10.1	38	20.2	188	100.0
One child	169	44.7	67	17.7	142	37.6	378	100.0
Two children	190	46.0	77	18.6	146	35.4	413	100.0
Three children	111	52.6	36	17.1	64	30.3	211	100.0
Four children	52	65.8	9	11.4	18	22.8	79	100.0
Five or more children	55	72.4	8	10.5	13	17.1	76	100.0
Total	708	52.6	216	16.1	421	31.3	1,345	100.0

*Table excludes all in non-nursing positions, registered nurses, single, male, religious sisters or brothers, and those who did not respond to one or both of the above items.

As might be anticipated, age of respondents and number of children were also statistically related. Table 3-8 gives the number of children reported by the married and formerly married women five years after graduation. Only a fifth of the youngest group reported having no children, and most of this group had at least one child, 42 percent. Two children was the most frequent response in all other age groupings. It is assumed that the number of children is not the sole determinant of a mother's working status but that the children's ages would also be a factor. Although children's ages are unknown in this study, it is assumed that the younger women probably have younger children. It is quite likely that the younger participants, having married recently, were obligated to the care of younger children, and that those who had larger families, probably with children past the pre-school years, may have been the older practical nurses. Future follow-up questionnaires may indicate how many of the younger participants will return to work when their children are of school age.

Table 3-8. For Married and Formerly Married Female Practical Nurses, Age at Time of Entrance and Number of Children Five Years After Graduation*

Number of Children	Age at Entrance									
	14-19		20-29		30-44		45 and Over		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No children	122	20.9	28	10.1	26	7.2	22	13.3	198	14.2
One child	245	42.0	73	26.3	40	11.0	29	17.6	387	27.8
Two children	170	29.1	93	33.5	117	32.2	47	28.5	427	30.7
Three children	44	7.5	46	16.5	95	26.2	32	19.4	217	15.6
Four children	2	0.3	21	7.6	44	12.1	18	10.9	85	6.1
Five or more children	1	0.2	17	6.1	41	11.3	17	10.3	76	5.5
Total	584	100.0	278	100.0	363	100.0	165	100.0	1,390	100.0

*Table excludes all in non-nursing positions, registered nurses, single, male, religious sisters or brothers, and those who did not respond to one or both of the above items.

Husbands' Social Index and Working Status

Social index assigned to husbands and the working status of the women in the study were statistically related (Table 3-9). It will be recalled that position one denotes the most complex occupations with the most education, and that each successively lower designation indicates less skill and less education. For the most part, classification

Table 3-9. For Married and Formerly Married Female Practical Nurses, Working Status and Husbands' Social Index Five Years After Graduation*

Husbands' Social Index	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
One	14	22.6	7	11.3	41	66.1	62	100.0
Two	36	40.9	14	15.9	38	43.2	88	100.0
Three	85	50.9	31	18.6	51	30.5	167	100.0
Four	287	47.0	112	18.3	212	34.7	611	100.0
Five	93	66.9	14	10.1	32	23.0	139	100.0
Total	515	48.3	178	16.7	374	35.1	1,067	100.0

*Table excludes all in non-nursing positions, registered nurses, single, male, religious sisters or brothers, and those who did not respond to one or both of the above items.

one also implies a high income and five a low income group. Descriptively, most spouses had been at the fourth position (Chapter II). Of the small proportion of women whose husbands were at social index level one, 22.6 percent were working full time and 66.1 percent were not working. As the husbands' social index level decreased, the full-time employment of the practical nurses increased. At the fourth position, which contained the highest frequencies, 47 percent of the wives were working full time and 34.7 percent were not working. These proportions closely resemble proportions for the total group. At the fifth position, the greatest proportion of wives were working full time, 66.9 percent, and only 23 percent were not employed at all.

There was some difference between husbands' social index and age of respondents, which were also statistically related (Table 3-10). The widest range exists for social index position five, being from 6.9 percent for the youngest group to 24.1 percent for the oldest group, as compared with 12.7 percent for the total group. Although husbands of most practical nurses were at the social index position of four, the wide range of proportions at the lowest level, five, implies that the younger respondents were married to men whose work was probably in a higher income bracket than the husbands of older respondents. It could be assumed, therefore, since husbands in the first classification of the social index scale probably had higher incomes than those at the fourth and fifth positions, there was less financial need for some of the younger practical nurses to seek work.

Table 3-10. For Married and Formerly Married Female Practical Nurses, Age at Time of Entrance and Husbands' Social Index*

Husbands' Social Index	Age at Entrance									
	14-19		20-29		30-44		45 and Over		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
One	35	6.5	16	7.3	14	5.2	3	3.6	68	6.1
Two	55	10.2	20	9.2	13	4.9	2	2.4	90	8.1
Three	95	17.7	28	12.8	36	13.4	11	13.3	170	15.4
Four	315	58.7	117	53.7	158	59.0	47	56.6	637	57.6
Five	37	6.9	37	17.0	47	17.5	20	24.1	141	12.7
Total	537	100.0	218	100.0	268	100.0	83	100.0	1,106	100.0

*Table excludes all in non-nursing positions, registered nurses, single, male, religious sisters or brothers, and those who did not respond to one or both of the above items.

Region of Country and Working Status

A statistical relationship exists between geographic region of practical nursing school and working status five years after graduation (Table 3-11). Of respondents from practical nursing programs in the Southern region (III), 71.9 percent were working full time and 19.2 percent were not working, as compared to 57.8 percent and 27.8 percent for the total group. Distributions in Regions II, the Midwest, and IV, the far West, were similar and are reflective of the national distribution. From schools in the North Atlantic, Region I, 49.4 percent were working full time, 18.7 percent part time, and 31.9 percent were not working. The proportion working full time in Region I was considerably lower than the proportion for the total sample.

The two factors: work status and region must be viewed in light of the statistical relationship between age and region of the country (Table 3-12). At the time of entrance and for those still in the study, 62.5 percent of Region I's participants were in the youngest group as compared to a national figure of 45.6 percent. Region III had only 27.7 percent in the youngest age group. The national figure for the 30-44 group was 23.1 percent;

Table 3-11. Working Status of Practical Nurses Five Years After Graduation, by Geographic Region of Practical Nursing School*

Region of Practical Nursing School**	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
North Atlantic (I)	249	49.4	94	18.7	161	31.9	504	100.0
Midwest (II)	266	54.6	75	15.4	146	30.0	487	100.0
South (III)	341	71.9	42	8.9	91	19.2	474	100.0
West (IV)	130	54.2	34	14.2	76	31.7	240	100.0
All regions	986	57.8	245	14.4	474	27.8	1,705	100.0

*Table excludes all in non-nursing positions, registered nurses, and those whose work status was unknown.

**North Atlantic (I) Conn., Del., D.C., Me., Mass., N.H., N.J., N.Y., Pa., R.I., Vt.
Midwest (II) Ill., Ind., Iowa, Kan., Mich., Minn., Mo., Neb., N.D., Ohio, S.D., Wis.
South (III) Ala., Ark., Canal Zone, Fla., Ga., Ky., La., Md., Miss., N.C., Okla., Puerto Rico, S.C., Tenn., Tex., Va., Virgin Islands, W.Va.
West (IV) Alaska, Am. Samoa, Ariz., Calif., Colo., Guam, Hawaii, Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo.

Region III had 31.2 percent and Region I only 16.3 percent in this category. However, age distribution as seen in the national sample does not appear to explain the high proportion of the non-working in Region IV, 31.7 percent (Table 3-11). The proportion of those over 30 in Region IV is higher than in any other region of the country.

Table 3-12. For Participants Remaining in Study, Age of Practical Nurses at Entrance, by Geographic Region of Practical Nursing School*

Region of Practical Nursing School	Age at Entrance									
	14-19		20-29		30-44		45 and Over		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
North Atlantic (I)	321	62.5	79	15.4	84	16.3	30	5.8	514	100.0
Midwest (II)	277	54.3	75	14.7	99	19.4	59	11.6	510	100.0
South (III)	142	27.7	153	29.9	160	31.2	57	11.1	512	100.0
West (IV)	76	29.9	61	24.0	71	28.0	46	18.1	254	100.0
All regions	816	45.6	368	20.6	414	23.1	192	10.7	1,790	100.0

*Table excludes those who become registered nurses and those who failed to give age.

Previously stated findings seem to point to the fact that the younger age groups are more likely to report they were not working five years after graduation.

Other Biographical Variables and Working Status

A relationship was also demonstrated between working status five years after graduation and graduation from high school prior to entrance to the practical nursing program (Table 3-13). This relationship had also been significant one year after graduation from the practical nursing program, but in the opposite direction. One year after graduation high school graduates were more likely to be working full time, but five years after graduation non-high school graduates were employed full time more frequently, 66.7 percent, as compared with 55.6 percent for high school graduates. The opposite was true for those not working; 29.9 percent of the high school graduates and 19.3 percent of the non-high school graduates were currently out of the work force.

Table 3-13. Working Status of Practical Nurses Five Years After Graduation, by High School Graduation Prior to Practical Nursing Program*

High School	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
Graduate	758	55.6	197	14.5	408	29.9	1,363	100.0
Non-graduate	228	66.7	48	14.0	66	19.3	342	100.0
Total	986	57.8	245	14.4	474	27.8	1,705	100.0

*Table excludes all in non-nursing positions, registered nurses, and those who did not respond to one or both of the above items.

However, age at time of entrance was also related to graduation from high school prior to entrance into the practical nursing program and this fact may influence the relationship between working status and high school graduation. For the sample of respondents in the study five years after graduation, most of the youngest group, 14-19, had graduated from high school, 93.3 percent, before starting their practical nursing studies (Table 3-14). Only 6.7 percent of this group were not high school graduates, and some of these were presumably students in a practical

Table 3-14. For Participants Remaining in Study, Age at Entrance and Graduation from High School Prior to Practical Nursing Program*

High School	Age at Entrance									
	14-19		20-29		30-44		45 and Over		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Graduate	761	93.3	301	81.8	251	60.6	115	59.9	1,428	79.8
Non-graduate	55	6.7	67	18.2	163	39.4	77	40.1	362	20.2
Total	816	100.0	368	100.0	414	100.0	192	100.0	1,790	100.0

*Table excludes all who became registered nurses and those who did not respond to one or both of the above items.

nursing program which also led to a high school diploma. Among the group 20-29 years old, 81.8 percent were high school graduates and 18.2 percent were not. The downward trend continues for those over 30. For those between 30 and 44, 60.6 percent were high school graduates and 39.4 percent were not; and for those 45 and over, 59.9 percent were high school graduates and 40.1 percent were not. Since the fact that older married and formerly married women are the bulk of the practical nursing work force five years after graduation, it is clear why the relationship between high school graduation and working status should exist. A great proportion of the older women still in the study had not finished high school before becoming practical nurses.

Among the total sample remaining in the study five years after graduation, only 13.5 percent of the respondents had identified themselves as being non-white. However, it appears that ethnic group classification is related to working status five years after graduation.[2] About three-fourths of the non-white respondents were employed full time, 11.8 percent part time, and 14 percent were not working (Table 3-15). Of the white respondents, 55.4 percent were working full time, 14.7 percent part time, and 29.9 percent were not working. A higher percentage of the non-white were in the work force.

Table 3-15. Working Status of Practical Nurses Five Years
After Graduation, by Ethnic Group*

Ethnic Group	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
White	815	55.4	217	14.7	440	29.9	1,472	100.0
Non-white	170	74.2	27	11.8	32	14.0	229	100.0
Total	985	57.9	244	14.3	472	27.7	1,701	100.0

*Table excludes all in non-nursing positions, registered nurses, and those who did not respond to one or both of the above items.

As has been true for many of the previously described variables, for the participants remaining in the study, age at entrance was also statistically related to ethnic group (Table 3-16). For the white respondents, 47.3 percent had been 14-19 years old, 18.4 percent 20-29, and 12 percent were 45 or over when starting their practical nursing studies. Among the non-white group, 35.4 percent were in the youngest group, 33.7 percent were from 20 to 29 years old, and 2.9 percent were 45 or over. Proportions in the group 30-44 years old did not show much variation.

Table 3-17 indicates the possibility of a relationship between annual family income at entrance and working status five years after graduation. The amount indicated on the first questionnaire by single respondents was presumably parents' income. The data as presented suggest that those who came from the lowest income group, under $2,500 annually, were most likely working full time, 72.3 percent, as compared to 58.9 percent for the total sample. Distributions in the categories, $5,000-$7,499 and $7,500-$9,999, were similar and proportions for full-time work somewhat smaller than the total. Although a considerable proportion from the income groups over $10,000 were also working full or part time, these groups had proportionally larger numbers, 39.5 percent and 43.3 percent, not working than did the lowest income group at 20.2 percent.

Family income and age at the time of entrance were also statistically related for the respondents remaining in the study five years after graduation. The lowest income bracket was comprised of 35 percent who were 14-19 years old, 23.8 percent who were either 20-29 or 30-44 years old, and 17.3 percent of those 45 years old or over. The highest incomes, $12,500 and over annually, included 57.4 percent of those 14-19, 20.6 percent of those 20-29, 14.7 percent of those 30-44, and 7.3 percent of those 45 years old and over. It would appear that

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[2] For proportional response to questionnaire by ethnic group, see Appendix A.

Table 3-16. For Participants Remaining in Study, Age of Practical Nurses at Time of Entrance and Ethnic Group*

Ethnic Group	Age at Entrance									
	14-19		20-29		30-44		45 and Over		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
White	731	47.3	284	18.4	346	22.4	185	12.0	1,546	100.0
Non-white	85	35.4	81	33.7	67	27.9	7	2.9	240	100.0
Total	816	45.7	365	20.4	413	23.1	192	10.8	1,786	100.0

*Table excludes those who became registered nurses and those who failed to respond to one or both of the above items.

Table 3-17. Working Status of Practical Nurses Five Years After Graduation, by Annual Family Income at Time of Entrance to Practical Nursing Program*

Annual Family Income	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
Below $2,500	175	72.3	18	7.4	49	20.2	242	100.0
$2,500-$4,999	291	61.5	63	13.3	119	25.2	473	100.0
$5,000-$7,499	262	55.9	75	16.0	132	28.1	469	100.0
$7,500-$9,999	103	53.6	39	20.3	50	26.0	192	100.0
$10,000-$12,499	39	45.3	13	15.1	34	39.5	86	100.0
$12,500 and over	27	45.0	7	11.7	26	43.3	60	100.0
Total	897	58.9	215	14.1	410	26.9	1,522	100.0

*Table excludes all in non-nursing positions, registered nurses, and those who did not respond to one or both of the above items.

higher proportions of younger students come from the middle and upper income categories than do older students (Table 3-18).

Choice of Nursing and Working Status

Not only biographical material but also data relating to choice of nursing, type of program, and particular school were examined in relationship to working status. One item, the first reason for choice of the practical nursing program, appeared to have a statistical relationship with working status five years after graduation (Table 3-19).

Table 3-18. For Those Remaining in Study, Age and Family Income at Time of Entrance to Practical Nursing Program*

Annual Family Income	Age at Entrance									
	14-19		20-29		30-44		45 and Over		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Below $2,500	91	35.0	62	23.8	62	23.8	45	17.3	260	100.0
$2,500-$4,999	184	37.5	131	26.7	123	25.1	53	10.8	491	100.0
$5,000-$7,499	223	45.3	86	17.5	132	26.8	51	10.4	492	100.0
$7,500-$9,999	96	48.2	27	13.6	55	27.6	21	10.6	199	100.0
$10,000-$12,499	56	62.2	8	8.9	18	20.0	8	8.9	90	100.0
$12,500 and over	39	57.4	14	20.6	10	14.7	5	7.3	68	100.0
Total	689	43.1	328	20.5	400	25.0	183	11.4	1,600	100.0

*Table excludes those who became registered nurses and those who failed to respond to one or both of the above items.

Table 3-19. Working Status of Practical Nurses Five Years After Graduation, by First Reason for Choice of Practical Nursing Program*

First Reason for Choice	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
Location of practical nursing school	34	68.0	10	20.0	6	12.0	50	100.0
Personal	242	59.5	64	15.7	101	24.8	407	100.0
Length of program	134	49.3	47	17.3	91	33.5	272	100.0
Financial	130	66.0	22	11.2	45	22.8	197	100.0
Good program	157	62.8	30	12.0	63	25.2	250	100.0
Entrance qualifications	160	59.0	35	12.9	76	28.0	271	100.0
Prefer bedside nursing	72	43.4	30	18.1	64	38.6	166	100.0
Total	929	57.6	238	14.8	446	27.7	1,613	100.0

*Table excludes all in non-nursing positions, registered nurses, and those who did not respond to one or both of the above items.

However, the small numbers giving each reason make the relationships difficult to interpret. Respondents citing reasons of location for choice of the practical nursing program were only about 3 percent of the total but showed a high proportion working full time, 68 percent. Reasons relative to location included the convenience of the practical nursing school, the desire of the respondent to be in a specific location, and the fact that this program was the only one available.

The next group with a high proportion working full time, 66 percent, were those citing financial reasons for their choice of the practical nursing program. This group included 12 percent of the total and derives from those who stated that they could afford the practical nursing program and they had a need or desire to be earning a salary as soon as possible. Also higher than average in proportions working full time were those who felt the practical nursing program offered a good education and was a sound program, 62.8 percent. Among those who had chosen practical nursing because of the length of the program or because they had a desire to do bedside nursing, higher proportions, 33.5 percent and 38.6 percent, respectively, were not working than among students citing other reasons.

Interruptions in Employment

Not only were items from the five-year follow-up questionnaire related to biographical and descriptive variables but some items from the fourth questionnaire were also interrelated statistically.

Respondents had been asked to indicate the approximate amount of time they had spent out of the work force. Apparently the longer practical nurses are out of the labor force during the first five years after graduation, the less likely they are to be working at this point in time. Over 80 percent of the respondents who stated that their employment had been interrupted for over three years were not working five years after graduation (Table 3-20). Those who had spent less than five months out of the labor force, however, were most likely to be employed full time, 59.8 percent. Of those currently working full time, 47.3 percent had had their employment interrupted between five months and one year. As the time out of the labor market increases, the proportion employed both full time and part time five years after graduation decreases. This finding is related to the comparison of working status one and five years after graduation and supports the assumption that study participants had a tendency to set their working patterns for their first five years as practical nurses soon after graduation.

Table 3-20. Working Status of Practical Nurses Five Years After Graduation, by Amount of Time Employment Was Interrupted*

Time Not Employed	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
Less than five months	122	59.8	41	20.1	41	20.1	204	100.0
Five months-one year	104	47.3	65	29.5	51	23.2	220	100.0
Over one year-less than two	76	36.9	35	17.0	95	46.1	206	100.0
Over two years-less than three	36	26.1	21	15.2	81	58.7	138	100.0
Over three years-less than four	10	10.6	8	8.5	76	80.9	94	100.0
Over four years	10	13.9	2	2.8	60	83.3	72	100.0
Total	358	38.3	172	18.4	404	43.3	934	100.0

*Table excludes all in non-nursing positions, registered nurses, those who had worked continuously, and those who did not respond to one or both of the above items.

The interruption of employment was also related to age of respondents and marital status five years after graduation (Tables 3-21 and 3-22). Among those 14-19 years old when they entered the practical nursing program, 73.3 percent had spent some time out of the work force and 26.7 percent had presumably been employed continuously. For those 20-29 years old, 63.4 percent had had their employment interrupted and 36.6 percent had been employed steadily. For the two oldest groups, proportions were similar: 39.1 percent and 38.7 percent had spent some time not working, and 60.9 percent and 61.3 percent had worked throughout the follow-up period.

Table 3-21. Interruption of Practical Nursing Employment During First Five Years After Graduation, by Age at Entrance to Practical Nursing Program*

Age at Entrance	Employment					
	Interrupted		Not Interrupted		Total	
	No.	%	No.	%	No.	%
14-19	567	73.3	207	26.7	774	100.0
20-29	222	63.4	128	36.6	350	100.0
30-44	153	39.1	238	60.9	391	100.0
45 and over	70	38.7	111	61.3	181	100.0
Total	1,012	59.7	684	40.3	1,696	100.0

*Table excludes all who became registered nurses and all who did not respond to one or both of the above items.

Viewing continuity of employment for the women in the study by marital status five years after graduation, it can be noted that those who were single (and had been throughout the study) had 40.9 percent whose employment had been interrupted and 59.1 percent who had worked continuously. For the married group (this includes all who were married throughout the study and those who had been married between graduation and the time of the five-year follow-up), 65.9 percent had had their employment interrupted and 34.1 percent had worked during the entire period.

Table 3-22. Interruption of Practical Nursing Employment Since Graduation, by Marital Status of Women Five Years After Graduation*

Marital Status	Employment					
	Interrupted		Not Interrupted		Total	
	No.	%	No.	%	No.	%
Single	101	40.9	146	59.1	247	100.0
Married	852	65.9	440	34.1	1,292	100.0
Formerly married	82	42.7	110	57.3	192	100.0
Total	1,035	59.8	696	40.2	1,731	100.0

*Table excludes male, religious sisters or brothers, and those who did not respond to one or both of the above items.

Of the formerly married group (this includes all who had been widowed, divorced, or separated throughout the study and those whose marital status had changed, usually from married to formerly married), 42.7 percent had had periods when they were not employed and 57.3 percent had worked continuously.

Another indicator that age and marital status greatly influence continuity of employment are the data in Table 3-23 which show a statistically significant relationship between age and number of times respondents stated that they had changed their positions. Among the youngest group, 33.2 percent reported no change. For the 20-29-year-old group, 43.4 percent had had no change, and among those over 30, slightly more than half reported having had the same position since graduation. The proportion reporting one change varied only from 19.3 percent in the youngest age group to 22 percent in the oldest. Larger proportions, reporting two or three changes, were in the two younger age groups.

Table 3-23. Number of Changes of Position Since Graduation, by Age at Entrance to Practical Nursing Program*

Number of Changes	Age at Entrance									
	14-19		20-29		30-44		45 and Over		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
None	246	33.2	142	43.4	195	52.8	89	51.4	672	41.8
One	143	19.3	65	19.9	80	21.7	38	22.0	326	20.3
Two	143	19.3	52	15.9	52	14.1	18	10.4	265	16.5
Three or more	208	28.1	68	20.8	42	11.4	28	16.2	346	21.5
Total	740	100.0	327	100.0	369	100.0	173	100.0	1,609	100.0

*Table excludes all who become registered nurses and those who did not respond to one or both of the above items.

Those whose marital status had not changed from the beginning of their association with practical nursing and who were older were less likely to have their employment interrupted. The longer practical nurses did not work during this period, the less likelihood there was that they would be employed at all at the five-year point in time. If employed, however, the group over 30 was more likely to have remained in one position or type of work.

Variables Related to Salary

Expectations regarding the salary to be earned as practical nurses was related to both working status five years after graduation and age at entrance (Tables 3-24 and 3-25). Looking at salary expectations by working status of those employed full time, 54.5 percent felt salary was as expected and 45.5 percent did not think so. Proportions are quite different for part-time workers, with 60.6 percent saying their expectations were met and 39.4 percent indicating salary had not lived up to what they expected. Among those not currently working, 44.6 percent thought practical nurses' earnings were as expected and 55.4 percent thought salary did not meet expectations.

In terms of salary expectations and age, the two younger groups more often felt that their expectations had not been met than did the two older groups. Those 14-19 years old were almost equally divided; 50.3 percent had had their expectations met and 49.7 percent had not. Of those 20-29, 44.6 percent felt their expectations had been met and 55.4 percent said they had not. For the two older groups, those 30-44 and 45 and over, 56.9 percent and 64.5 percent said their salary expectations had been met and 43.1 percent and 35.5 percent thought they had not. Since the older groups were also those more frequently working, it may very well be these groups which found their earnings what they had anticipated.

Table 3-24. Expectations Regarding Salary, by Working Status of Practical Nurses Five Years After Graduation*

Working Status	Salary					
	Expectations Met		Expectations Not Met		Total	
	No.	%	No.	%	No.	%
Full time	477	54.5	399	45.5	876	100.0
Part time	132	60.6	86	39.4	218	100.0
Not working	170	44.6	211	55.4	381	100.0
Total	779	52.8	696	47.2	1,475	100.0

*Table excludes all in non-nursing positions, registered nurses, and those who did not respond to one or both of the above items.

Table 3-25. Expectations Regarding Salary and Age at Time of Entrance to Practical Nursing Program*

Age at Entrance	Salary					
	Expectations Met		Expectations Not Met		Total	
	No.	%	No.	%	No.	%
14-19	363	50.3	358	49.7	721	100.0
20-29	137	44.6	170	55.4	307	100.0
30-44	197	56.9	149	43.1	346	100.0
45 and over	100	64.5	55	35.5	155	100.0
Total	797	52.1	732	47.9	1,529	100.0

*Table excludes all who become registered nurses and those who did not respond to one or both of the above items.

The variable "expectations regarding salary" was in turn statistically related to the actual salary earned by practical nurses working full time (Table 3-26). Of those in the very lowest salary group, under $200, 45.5 percent felt salary was as expected and 54.5 percent did not find salary as anticipated. This rather large proportion reporting that quite a low salary met their expectations leads to the speculation that cash salary only was reported and practical nurses may have also received maintenance or some other benefits. Generally, about a third in the next three categories, which included salaries from $201 to $350 a month, felt that salaries met their expectations. In the next two higher categories, $351-$400 and $401-$450, 59.7 percent and 66.8 percent, respectively, felt salary had met their expectations. For the very highest salaries reported, over $450 a month, 73.9 percent felt that salaries met their expectations and 26.1 percent felt that they did not.

Salaries, as reported by practical nurses employed full time, had a statistical relationship to geographic region of the country in which their practical nursing school had been located. Descriptive data imply that most respondents had attended a practical nursing school in the same state in which they had attended high school; that, of

Table 3-26. Expectations of Salary by Reported Monthly Salary for Practical Nurses Employed Full Time Five Years After Graduation*

Monthly Salary	Salary					
	Expectations Met		Expectations Not Met		Total	
	No.	%	No.	%	No.	%
Under $200	15	45.5	18	54.5	33	100.0
$201-$250	12	36.4	21	63.6	33	100.0
$251-$300	36	31.3	79	68.7	115	100.0
$301-$350	53	38.1	86	61.9	139	100.0
$351-$400	122	58.7	86	41.3	208	100.0
$401-$450	125	66.8	62	33.2	187	100.0
Over $450	102	73.9	36	26.1	138	100.0
Total	465	54.5	388	45.5	853	100.0

*Table includes only those full-time L.P.N./L.V.N.'s who responded to both items.

those employed, convenient location was a discriminating factor among those working five years after graduation; and that most participants had been employed as practical nurses in only one state. It can be assumed, therefore, that the sample represents, to a great extent, a stable group and that regional data, as based on the location of the practical nursing school, do reflect the actual geographic location of the respondents. Table 3-27 indicates that

Table 3-27. Reported Monthly Salary for Practical Nurses Employed Full Time Five Years After Graduation, by Geographic Region of Practical Nursing School*

Monthly Salary	Region I		Region II		Region III		Region IV		All Regions	
	No.	%	No.	%	No.	%	No.	%	No.	%
$0-$250	22	9.1	9	3.5	41	12.5	5	4.1	77	8.1
$251-$300	17	7.0	25	9.7	79	24.0	10	8.1	131	13.8
$301-$350	23	9.5	46	17.9	73	22.2	16	13.0	158	16.6
$351-$400	65	26.9	62	24.1	72	21.9	34	27.6	233	24.5
$401-$450	60	24.8	77	30.0	37	11.2	30	24.4	204	21.5
Over $450	55	22.7	38	14.8	27	8.2	28	22.8	148	15.6
Total	242	100.0	257	100.0	329	100.0	123	100.0	951	100.0

*Table includes only those working as full-time L.P.N./L.V.N.'s whose salary was reported.

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participants in the North Atlantic (I) and Western (IV) regions reported the highest salaries. In these two regions, the three highest salary ranges each contained about a quarter of the responses, making a total of almost 75 percent who were earning over $351 a month. In Region II, the Midwest, 68.9 percent earned over $351 a month with the single largest representation, 30 percent, being in the $401-$450 range. However, in the South, only 41.3 percent earned over $351 a month for full-time work. The salary category reported most often in the South was between $251 and $300 a month by 24 percent of the respondents. More than half of the full-time practical nurses in the South earned $350 or less a month.

The wide range of salaries reported by practical nurses for full-time work has been related not only to respondents' reaction to the item indicating that in many cases salary was not what they had expected but also to the region of the country. Realistic differences do appear to exist.

Other Related Variables

Membership in nursing and health organizations was reported on the fourth questionnaire. Practical nurses who were working full time were more likely to have membership in the practical nursing organizations than those who were not working (Table 3-28). Of the 224 members of the National Federation of Licensed Practical Nurses (NFLPN), 82.1 percent were working full time, 8.5 percent part time, and 9.4 percent were not working. Of the approximately 1,500 who did not belong to the NFLPN, 54.2 percent were employed full time, 15.3 percent part time, and 30.6 percent were not working. The same relationship holds true for the small group who were members of the National Association for Practical Nurse Education and Service (NAPNES) and other health organizations. In this case, other organizations refer to state and hospital associations and specialty groups within nursing and health. Of the 111 who were members, 77.5 percent were employed full time and of those without membership, 56.5 percent were full-time workers. There was no demonstrable relationship between membership in any of the other nursing organizations or the practical nursing school alumni and working status.

Table 3-28. Membership in Practical Nursing and Health Organizations by Working Status of Practical Nurses Five Years After Graduation*

Membership	Working Status							
	Full Time		Part Time		Not Working		Total	
	No.	%	No.	%	No.	%	No.	%
NFLPN	184	82.1	19	8.5	21	9.4	224	100.0
Not a member	802	54.2	226	15.3	453	30.6	1,481	100.0
Total	986	57.8	245	14.4	474	27.8	1,705	100.0
NAPNES and other organizations	86	77.5	14	12.6	11	9.9	111	100.0
Not a member	900	56.5	231	14.5	463	29.0	1,594	100.0
Total	986	57.8	245	14.4	474	27.8	1,705	100.0

*Table excludes all in non-nursing positions, registered nurses, and those whose work status was unknown.

Apparently, employment in nursing may be a stimulus in seeking additional study (Table 3-29). The courses referred to in these responses include all study beyond the basic practical nursing program except attendance in the registered nurse program. During their first five years as practical nurses, 24.3 percent of the full-time and 26.8 percent of the part-time workers had taken additional courses as compared with 10.9 percent of those not currently working. However, only about a fifth of those who responded had pursued additional study since graduation.

Table 3-29. Attendance at Additional Courses Since Graduation, by Working Status of Practical Nurses Five Years After Graduation*

Working Status	Additional Courses					
	Attended		Did Not Attend		Total	
	No.	%	No.	%	No.	%
Full time	217	24.3	677	75.7	894	100.0
Part time	60	26.8	164	73.2	224	100.0
Not working	46	10.9	375	89.1	421	100.0
Total	323	21.0	1,216	79.0	1,539	100.0

*Table excludes all in non-nursing positions, registered nurses, and those who did not respond to one or both of the above items.

Statistically significant relationships were also demonstrated in two other areas: plans for additional education and subsequent attendance at courses beyond the basic practical nursing program; and between the responses as to whether or not work in practical nursing had met certain expectations at the time periods of one and five years after graduation.

More than one-half (53 percent) of those participants who had attended courses during their first five years as practical nurses stated, when they were graduating from practical nursing school, that they intended to seek further education (Table 3-30). The largest group of those who had not attended courses subsequent to graduation were those who, when they were due to graduate, thought they would not go further in their education, 47.2 percent. Some participants had obviously changed their minds; 87, or 31 percent, who originally stated that they had not planned further education and 45, or 16 percent, who were undecided about future studies eventually did pursue some additional course work. On the other hand, 386 participants, or 38.9 percent, who thought they would go on in nursing had not taken any further academic work.

There is a persistence of perception suggested in the participants' responses to the four items asking if practical

Table 3-30. Plans for Education at Graduation from Practical Nursing School and Subsequent Attendance at Additional Courses During Five Years Since Graduation*

At Graduation	Additional Courses					
	Attended		Did Not Attend		Total	
	No.	%	No.	%	No.	%
Additional education	149	53.0	386	38.9	535	42.0
No additional education	87	31.0	468	47.2	555	43.6
Undecided	45	16.0	138	13.9	183	14.4
Total	281	100.0	992	100.0	1,273	100.0

*Table excludes those who did not respond to one or both of the above items.

nursing had met their expectations. Those who responded in a specific manner one year after graduation were very likely to respond in the same manner five years after graduation (Table 3-31). These statistically significant relationships are tempered by the fact that, except for the item regarding salary, respondents generally stated that their expectations had been met. In terms of personal satisfaction, 95.6 percent of those who said their expectations had been met one year after graduation gave the same response five years after graduation. The proportions of those whose expectations had not been met at either time is a relatively small part of the total. Of the 54 who thought one year after graduation that their expectations had not been met, 68.5 percent had changed their responses at the five year after graduation point in time and said practical nursing was personally satisfying. There were only 17 respondents who felt that their expectations for personal satisfaction had not been met either one or five years after graduation.

For the item concerning salary, 68.8 percent felt that salary met their expectations at both time periods, and 31.2 percent thought salary met their expectations one year after graduation but not five years after graduation.

Table 3-31. Extent to Which Expectations of L.P.N./L.V.N.'s Were Met One and Five Years After Graduation*

One Year After Graduation	Five Years After Graduation					
	Expectations Met		Expectations Not Met		Total	
	No.	%	No.	%	No.	%
Personal satisfaction						
Expectations met	1,460	95.6	67	4.4	1,527	100.0
Expectations not met	37	68.5	17	31.5	54	100.0
Total	1,497	94.7	84	5.3	1,581	100.0
Salary						
Expectations met	463	68.8	210	31.2	673	100.0
Expectations not met	277	36.2	489	63.8	766	100.0
Total	740	51.4	699	48.6	1,439	100.0
Working conditions						
Expectations met	868	77.9	246	22.1	1,114	100.0
Expectations not met	143	47.2	160	52.8	303	100.0
Total	1,011	71.3	406	28.7	1,417	100.0
Employment available						
Expectations met	1,339	96.6	47	3.4	1,386	100.0
Expectations not met	53	76.8	16	23.2	69	100.0
Total	1,392	95.7	63	4.3	1,455	100.0

*Tables exclude those who became registered nurses and all those who did not respond to one or more of the above items.

Almost a similar proportion, 36.2 percent, had changed their minds; one year after graduation they thought salary expectations had not been met but five years after graduation they indicated that their expectations were met. Almost two-thirds, 63.8 percent, felt salary was not as expected both at the one-year and five-year periods. Although the proportions reporting met expectations is lower for salary, the statistical relationship shows a consistent response.

Working conditions were as expected one and five years after graduation for 77.9 percent of the respondents, but 22.1 percent who had stated one year after graduation that working conditions met their expectations changed their responses five years after graduation. Some of those who felt that their expectations were not met one year after graduation gave positive responses five years after graduation, 47.2 percent; however, 52.8 percent of those who felt working conditions had not met their expectations one year after graduation continued to feel this way five years after graduation.

Almost the entire group who said employment was readily available one year after graduation continued to give this response five years after graduation, 96.6 percent. Only 47 respondents, 3.4 percent, who thought work was generally available one year after graduation had changed their responses five years after graduation. Fifty-three participants, or 76.8 percent, who had not found employment readily available one year after graduation thought that work was available five years after graduation, and 23.2 percent, 16 respondents, had not thought employment was readily available at either time period.

Summary

Study of statistical interrelationships reveals that working status of practical nurses five years after graduation is related to certain characteristics of the students who entered practical nursing schools: age, marital status, graduation from high school prior to nursing school, ethnic group, and family income. Working status was also related to the time of marriage, current marital status and number of children, husband's social index classification, interruptions in nursing employment, expectations regarding salary, membership in practical nursing organizations, and attendance at additional courses. Location of the practical nursing school by region of the country and working status five years after graduation were statistically related. That practical nurses seemed to set their work patterns soon after graduation is implied by the statistical relationship between working status one and five years after graduation.

Several distinctive groups, each with its own work patterns, are represented within the total sample of practical nurses responding five years after graduation. These groups are best understood by defining them by marital status at the time of entrance and five years later, age at time of entrance, time of marriage, and number of children.

Most of the youngest students to enter practical nursing were single and had graduated from high school prior to practical nursing school. Proportions of those 14-19 years old at entrance were higher in all income brackets over $5,000 than proportions of youngest students in the total sample. Among the youngest, a high proportion had married during the first five years after graduation and usually reported having one or two children. Their husbands were higher on the social index scale used in this study than their older cohorts. Somewhat less than half of the youngest group were employed as full-time practical nurses five years after graduation; but if employed, they would have changed position more frequently than the older practical nurses. Almost three-quarters of this group reported interruption of employment in nursing during the five years since graduation.

If students entered practical nursing school between the ages of 20 and 29, there was almost an equal chance of their being single or married. Most were high school graduates before going to practical nursing school. The greatest proportional difference in representation between white and non-white is in this age range. Five years after graduation, the majority of this group were married and about a third had two children. Fifty-eight percent of those 20-24 years old and 72 percent of those 25-29 years old at entrance were full-time practical nurses five years after graduation. Somewhat over 60 percent of those who had started practical nursing school between 20 and 29 years old had some interruption of employment since graduation and over half felt that salary had not met their expectations.

There were some common characteristics among the students entering practical nursing between the ages of 30 and 44 and those 45 and over. The majority of both of these groups entered practical nursing as married women and a considerable proportion had not graduated from high school prior to practical nursing school. Proportions of white and non-white were similar in the group who started practical nursing studies between 30 and 44 years old but those 45 and over were predominantly white. Proportionally older students were underrepresented in the highest income bracket. During the five years since graduation, there was a slight increase in the proportions reporting themselves as widowed, divorced, or separated, and generally the older respondents had two or three children. Approximately 70 percent of the older practical nurses were employed in nursing full time five years after graduation. The majority reported that their employment in nursing had not been interrupted, more than half had had no changes of position during the time since graduation, and higher proportions reported that their salary expectations had been met than did the younger practical nurses.

The relationship of marital status and working status shows a substantial contribution to the health labor force is made by the formerly married group (widowed, divorced, and separated women). Over 70 percent who had entered the practical nursing program formerly married and almost 78 percent of those formerly married five years after graduation were working as full-time practical nurses. Among the practical nurses who remained single five years after graduation, more than 70 percent were employed as full-time practical nurses. The highest proportion who had attended, been graduated from a registered nurse program, and were employed as registered nurses came from the single group.

Respondents who had attended a practical nursing program in the South were working full time five years after graduation in greater proportions than respondents who had attended school in the other regions. Those employed as practical nurses were more likely to be members of practical nursing organizations and to pursue additional study beyond the basic nursing program than those who were currently not working. For the participants in this study, fulfillment of expectations regarding work in practical nursing was related to the time periods of one and five years after graduation. It can be said that not only do practical nurses set their work patterns soon after graduation but that they also perceive their nursing work in a consistent manner for the first five years after graduation.

CHAPTER IV

STATUS OF THREE SPECIAL GROUPS FIVE YEARS AFTER GRADUATION

Among the practical nurses who returned questionnaires five years after graduation, three groups were identified as meriting separate consideration: the male practical nurses, those who had left practical nursing for some other field, and those who had become or were studying to become registered nurses. None of these groups are numerically large enough to report meaningful statistical interrelationships; however, a description of each group relating to specific variables is presented.

Male Practical Nurses

Originally, 63 men were part of the sample; of these, 48 graduated from the practical nursing program and 28 responded to the fourth questionnaire (see Appendix A). Five years after graduation, 20 men were married, 2 had been married at some time, 5 were single, and for 1 marital status was unknown. All the men did not answer every questionnaire item; therefore, the total number given for each response varies. Of the 27 who indicated working status, 11 were full-time and 3 part-time licensed practical nurses, 3 were not currently employed, and 10 were no longer in nursing. Five of the 10 who had left nursing were in health-related occupations and 5 were in business or industry. However, 23 men reported holding current licensure as practical or vocational nurses. Six men working in nursing reported their clinical field as general, medical, surgical, or medical and surgical combined. Three were in psychiatric nursing and 5 were in other clinical areas. Nine men were working in the hospital situation, 3 were in public health agencies, and 2 had other employers. Six men designated themselves as staff nurses, 2 were head nurses, and the remainder named other positions or sometimes held two positions.

Twenty-two of the men responded to the item asking for the number of times they had changed position or type of work since graduation. Six said they had not changed position, 5 had changed position once, 10 had changed twice, and 1 man had changed three or more times. Ten men had changed position because of financial reasons; 6 had other reasons. Eighteen men had worked as licensed practical nurses in only one state; 4 in more than one state; and the others did not respond. Generally, male practical nurses did not belong to nursing organizations, engage in community activities, or take additional courses. The actual numbers were: 7 who belonged to one of the nursing organizations, 3 who had participated in community health activities, and 3 who had taken additional course work. None of the men had attended a program leading to registered nurse licensure. Three items asking if practical nursing met their expectations were answered by 22 men; 21 found personal satisfaction in their work, 18 thought working conditions were as expected, but only 7 responded that salary met their expectations. Of the 23 men who responded to the item asking if employment had always been available, 21 indicated that work had been readily available. Although only 14 men were still actively engaged in nursing, 18 responded to the item asking for approximate monthly earnings from nursing work. Of these, 5 indicated a salary from nursing of less than \$350 a month, 4 earned between \$351 and \$450, 3 earned between \$451 and \$500, and 6 gave amounts over \$500 a month. The amounts given include the three part-time workers. There is always the possibility that some men reported income other than from their nursing work or that those who stated that they were no longer in nursing had some part-time nursing income.

Those No Longer in Practical Nursing

In order to describe the group of 89 participants (10 men and 79 women) who, five years after graduation, stated they were no longer in nursing, certain variables were selected from the first and fourth questionnaires. Some of these respondents gave a reason for having left nursing; 28 said that they could earn more money at other work, 10 found the position or hours in nursing inconvenient for them, 9 gave family or personal reasons, 4 indicated that they had lost interest in nursing, but the majority, 38, gave more than one reason, ambiguous responses, or no reason. These participants were spread over all the age groups but the highest proportion in a single age group, 28.7 percent or 25 individuals, were 18 or 19 years old when they entered the nursing program, and more than one-third had come from small or rural communities. The largest proportion of the group, 36 percent or 32 individuals, were from the Southern region of the country. Seventy-one of the 89 were high school graduates. Seventy-six identified themselves as white, 12 as non-white, and 1 did not respond to this item. Sixty-seven stated that they came from families with an annual income of less than \$7,500.

Generally, the reasons given for the choice of nursing were the same for this group as for those who remained in practical nursing. There was only one exception; those who mentioned a spiritual commitment, or God, as their reason for choice of nursing seemed to have left nursing to a greater degree, 11.1 percent, than those who did not mention a spiritual commitment, 4.5 percent. However, among the respondents remaining in the study five years after graduation, only a small group (108 individuals) had given spiritual reasons for the choice of nursing, and of these 12 had left nursing. Again, a larger group left nursing (5 of the 32) who had mentioned God and/or a member of the clergy as the person who had been most influential in their decision to enter nursing than those who did not mention it. Forty-eight of those no longer in nursing had chosen their particular practical nursing school because it was conveniently located.

Upon graduation from the practical nursing program, 63 of the women thought that they would be employed in nursing even after marriage. Five years after graduation, 52 of the women who were no longer in nursing were married, 10 had been married at one time, 16 were single, and 1 individual did not give her current marital status. In spite of the fact that these respondents were currently employed in non-nursing occupations, 69 stated that they held a practical or vocational nurse license and only 1 individual indicated that the practical nurse license had never been attained.

Although those no longer in nursing were not expected to respond to questions concerning fulfillment of expectations during the first five years after graduation, about 60 or more did answer each item. Most felt that practical nursing had met their expectations in terms of personal satisfaction. This distribution was not different from those who remained in nursing. There is some suggestion that the responses to the other items, salary, working conditions and availability of employment, were different from the group which remained in nursing. Sixty-three and three-tenths percent of those who left nursing felt salary had not met their expectations as compared with 47.8 percent of those still in nursing who gave a negative response. Working conditions elicited a negative response from 46.7 percent of those who had left nursing and from 28.4 percent of those still in nursing. Only 4.1 percent of those in practical nursing had found employment was not available but 11.8 percent of those currently in other work gave this response. From these variables, it could be concluded that both men and women who are practical nurses may, for financial reasons or for some combination of reasons, seek work other than nursing. It is possible that the geographic location, often rural and/or Southern, did not give these practical nurses a wide choice of nursing positions, employing agencies, or a satisfactory financial return. Most, however, retain their license to nurse.

Those Who Completed or Were Attending Registered Nurse Programs

All of the 73 practical nurses who had completed or were currently enrolled in a registered nurse program were women. At the time the five-year follow-up questionnaires were collected, 46 had already graduated from a registered nurse program and 27 were currently enrolled. Of the 46 registered nurse graduates, 35 had been single at the time they started their practical nursing studies, 10 were married, and 1 was formerly married. Five years after graduation, 25 remained single, 19 were married, and 2 had been previously married. Only 3 of the married or formerly married had no children, 6 had one child, 2 had two children, 8 had three or more children, and 2 did not answer this item. The group pursuing registered nurse studies were generally younger than those who had not. At the time of admission to the practical nursing program, 28 of the registered nurse graduates had been 19 years of age or younger, 10 were in their twenties, 3 were between 35 and 44, 2 were over 45, and 3 did not give their age.

The graduates of registered nurse programs reported residence in communities of all sizes during their high school years. However, somewhat higher proportions came from two extremes, the small rural community and the very large city. Before studying practical nursing, 40 of those completing registered nurse studies stated they were high school graduates. Presumably, the others had obtained a high school diploma before admission to the registered nurse program. Among the group who became registered nurses, 3 had also attended a registered nurse program before going to practical nursing school. This would imply that these individuals may have been enrolled in at least three nursing schools. Of the 46 graduated from a registered nurse program, 40 classified themselves as white and 6 were non-white. Of the 40 who reported an annual family income, 28 gave amounts below $7,500 and of this group, 11 were below $5,000.

There was a similarity of reasons for choice of nursing as a profession among those who had pursued further nursing education and those who had remained practical nurses; but the occupational description of the person cited as having been most helpful in assisting with the choice of a nursing school varied between the two groups. Those who had mentioned a guidance counselor as having been most helpful to them in choosing practical nursing completed the registered nurse program more often than those who named persons in other occupations. About a fourth of the registered nurse graduates named a guidance counselor as compared with 14.1 percent of the practical nurses.

Five years after graduation, 36 of the registered nurses were employed, 8 were not working, and 2 gave ambiguous answers to the item regarding work status. Clinical field, employing agency, and position for these 36 participants is described in Chapter II. As with the greatest proportion of practical nurses, the registered nurses were frequently staff nurses in hospitals doing medical, general, or surgical nursing.

Of those who were registered nurses, 10 were members of the American Nurses' Association and 3 had membership in NLN. To a great extent, those who had obtained registered nurse education had financed their education through their own resources: 9 stated they had paid for their education with their savings, 5 by their earnings, and 11 cited a combination of savings and earnings. Another 11 had some scholarship help which they supplemented with other funds as necessary; the remainder of the group mentioned other methods of payment or gave no reply to this item.

Of the 27 participants currently enrolled in registered nurse programs, 12 were single, 14 married, and 1 had been married. Among the married and formerly married, 2 had no children, 5 had one child, 4 had two children, 2 reported three children, and 2 did not give the number of children. Fifteen of this group had been 19 years old or younger when starting their practical nursing studies, and 20 had completed high school prior to practical nursing school. One of the current registered nurse students had attended a registered nurse program prior to practical nursing school. Seventeen of those enrolled in registered nurse programs said they were white, 9 were non-white, and 1 did not reply to this item. Of the 23 who gave an annual family income on the initial questionnaire, 17 reported incomes below $7,500 and of these, 11 were below $5,000 annually.

Somewhat similar to the registered nurse program graduates, a fifth of those currently enrolled had received help in making their original decision about practical nursing from a guidance counselor. Seven of those currently in a nursing school were financing their studies with their savings, 5 by earnings, 4 with a combination of savings and earnings, and 5 had some scholarship assistance. Five more registered nurse students were using a combination of several methods to finance their education and 1 individual did not reply to the item.

Both the group who were currently enrolled and those who had already graduated from a registered nurse program often gave responses which were similar to each other and which, in some instances, differed from those who remained as practical nurses.

The table which follows (4-1) describes plans for additional nursing education and subsequent attendance in a registered nurse program. Frequencies include all who had reported attendance in a registered nurse program, regardless of outcome. Two-thirds of those who attended a registered nurse program indicated their intention to seek additional education at the time they entered practical nursing. When they were ready to graduate from the practical nursing school, among those planning further education, 74.2 percent attended a registered nurse program.

Upon starting their nursing studies, 9.4 percent of those who went into a registered nurse program had not intended to continue their education and 25 percent had been undecided. As has been described earlier, not all who attended a registered nurse program completed and graduated. Since the questions at the time of entrance and graduation simply asked for plans concerning further nursing education and did not specify registered nurse studies, some responses may have been referring to other types of nursing preparation.

Of three items asking if practical nursing had met their expectations, both the group which had graduated and the group enrolled in registered nurse programs appeared to differ from those who had remained practical nurses. Generally, practical nurses felt that their work met their expectations in terms of personal satisfaction. However, 45.5 percent of the registered nurse graduates thought practical nursing had not met their expectations for personal satisfaction; 32 percent of the registered nurse students but only 5.6 percent of the practical nurses gave negative responses to this item. Although many of the practical nurses implied dissatisfaction with their salary, both of the groups in registered nursing were more dissatisfied. About three-quarters of the registered nurses, 62.5 percent of the registered nurse students, and 47.6 percent of the practical nurses felt that salary had not met their expectations. Of those continuing as practical nurses, 71.7 percent thought that working conditions had met their expectations, but of the registered nurses, 40 percent, and of the registered nurse students, 56.5 percent felt working conditions were as expected.

Table 4-1. Plans for Additional Education at Entrance and Graduation from Practical Nursing Program and Subsequent Attendance at Registered Nurse Program

Plans at Entrance	Registered Nurse Program*					
	Attended		Did Not Attend		Total	
	No.	%	No.	%	No.	%
Additional education	84	65.6	634	46.5	718	48.1
No more education	12	9.4	293	21.5	305	20.4
Undecided	32	25.0	437	32.0	469	31.4
Total	128	100.0	1,364	100.0	1,492	100.0
Plans at Graduation						
Additional education	92	74.2	445	38.6	537	42.1
No more education	23	18.5	537	46.6	560	43.9
Undecided	9	7.3	171	14.8	180	14.1
Total	124	100.0	1,153	100.0	1,277	100.0

*Table excludes those who did not respond to one or more of the above items.

Those practical nurses who were attending a registered nurse program or had graduated from one within the five years after their graduation from practical nursing school were often from the younger group of practical nursing students. About half of the graduates and registered nurse students were single; but, if married, this group very frequently had two or three children. Most of the graduates were licensed as registered nurses and employed in nursing. For the most part, both graduates of registered nurse programs and registered nurse students had financed their own education through savings and earnings and had probably planned to continue in nursing even when they were in practical nursing school. Often they had assistance in their decisions about their initial nursing career from a guidance counselor. Higher proportions of the registered nurses and registered nurse students responded negatively to items asking if practical nursing had met their expectations than did participants who remained in practical nursing.

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

The primary purpose of the Nurse Career-pattern Study is to provide basic descriptive data about groups of nurses who attended four types of nursing education programs. This particular section of the study deals solely with those who entered a sample of practical nursing schools in 1962 and who responded to a succession of questionnaires from 1962 through 1968.

A secondary purpose was to develop hypotheses based upon statistically significant relationships between responses on any of the questionnaires. The broad spectrum of questions and the purposeful lack of hypothesis testing do not provide for any firm conclusions. Many of the findings, however, do establish a basis for recommendations and for further study.

This report, which encompasses a six-year period, substantiates many of the recommendations made in the initial report, which covered a two-year period.[1] The responses five years after graduation show even more clearly than before the relationships of the work life of this predominantly female group to their ages, marital status, number of children, and economic factors.

Five years after graduation, or six years after entrance to the school, the greatest contribution to the health manpower work force had been made by those women of 25 or older, who had been married at the time they entered the practical nursing program, and whose family income in 1962 was less than $5,000 annually. Although those who reported that they were non-white and/or had less than a high school education were only a small part of the total sample, they, too, were making a continuous contribution to the health labor force.

Respondents who started in the study as beginning practical nursing students and remained in the study as practical nurses five years after graduation have three characteristics which are closely related to their working status. These are age, marital status, and number of children. Age and marital status were also significantly related to working status one year after graduation. It would appear that the younger participants were when they entered practical nursing programs, the more likely they were to withdraw from the nursing work force during the first five years after graduation. During this time period, however, unmarried respondents in the 14-19 year age group declined from 97.2 percent to 20.6 percent. Only 20.9 percent of the youngest married group had no children five years after graduation. Thus, it can be concluded that change in marital status and subsequent childbearing, rather than simply age, are the statistically meaningful characteristics related to work force participation.

One other biographical item, the family income reported by the entering students, was statistically related to working status at both the one- and five-year periods after graduation. The economic factor is perhaps more independent than the age factor. Among the study group, cross-tabulations of age and family income demonstrated an inverse relationship. The youngest group to enter practical nursing came from families whose incomes were higher than the older practical nursing students. The importance of the economic factor is further suggested in the relationship of husbands' social index and working status of practical nurses five years after graduation. Women are more frequently employed full time if their husbands' social index classification is five and less frequently employed if husbands' social index is one. The five classification includes predominantly low income-producing types of work, while the one implies higher income levels. However, husbands' social index was also statistically related to age. Although there was a difference of only some 3 percent in the proportions of younger and older groups married to men of social index one, there is a definite difference, 6.9 percent and 24.1 percent, respectively, between the younger and older practical nurses who are married to men with social index classification five. Although the relationship of these two variables has been established from the data of the five-year follow-up, the full independence of the social index factor from age cannot yet be fully determined. Reports of working status of the younger group 10 and 15 years after graduation may give some indication of the true relationship of the social index of spouse to working status, which at later times may be independent of the childbearing factor. The relationship between husbands' social index and wives' employment in practical nursing raises some questions concerning culture-bound attitudes and occupational description. By the index used in this study, practical nurses with 12 years of education would be classified at the fourth position. The attitudes of husbands at position one--i.e., those who may be in occupations classified as "professional"--toward their wives' employment in a "vocational" occupation cannot be determined by descriptive data. It is possible, however, that husbands' attitudes and attitudes of their peers could have a bearing upon wives' employment.

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[1] Barbara L. Tate and Lucille Knopf. Nurse Career-pattern Study. Part I: Practical Nursing Programs. National League for Nursing, New York, 1968.

In guiding younger students toward practical nursing, it should be understood that their work contribution will probably be dependent upon the timing of their marriage, the advent of children into the family, and their husbands' position and education. Some younger students may find practical nursing the first step to a career as a registered nurse. Career planning for young unmarried students should be geared differently from that for older married students. The younger group may very well be interested in part-time employment and thereby be encouraged to continue participation in nursing.

Practical nursing students who start their studies at 25 or older, who are probably married or formerly married, appear to make the most substantial contribution to the health labor force during the first five years after graduation. Although these women may be occupationally limited, since many are not high school graduates, they generally find their work as practical nurses satisfying. They do not change position or type of work as frequently as younger practical nurses.

Since working patterns of practical nurses appear to be set soon after graduation, there is a definite need for career planning while students are still in nursing school. Practical nursing schools should reevaluate their responsibilities in preparing their graduates for participation in the local labor market. The need for separate and distinct planning for both younger and older groups, which was pointed out in the earlier report, continues to appear important four years later.

Data tallied according to region of the country reveal that the Southern area differs from the rest of the country. The differences no doubt reflect characteristics unique to that section of the country. The Southern region had the highest percentage of practical nurses working full time. Studies of the registered nurse population, on the other hand, show that the states comprising the Southern region have the lowest number of registered nurses in relation to population of any area of the country.[2] This may create a climate in which recruitment of mature women for practical nursing is more direct and intensive. Prospective applicants who have unfulfilled economic needs may see the possibility of immediate and continuous employment as an incentive to enter a short-term training program. The prestige of practical nurses may be higher where L.P.N.'s carry a major portion of patient care. The subjective and personal rewards of nursing may be greater in rural areas or in small communities where the individual's contribution is more visible. These suggestions are implicit in the interpretation of the data. In the Southern region, more than half of those responding five years after graduation had entered practical nursing when they were 25 years old or more. These older respondents tend to come from families with a lower economic base, are more likely to be married to semiskilled or unskilled workers, and probably have been residing in the same geographic area for the full six years of the study.

A factor in the study which is consistent with general guidance principles is that of matching ability and occupational preparation. Although there were few practical nurse graduates who went on to become registered nurses, it appears that those who did had not found that practical nursing met their expectations. Inasmuch as they had ability and motivation to enter a registered nurse program, it would appear that they should have been guided to this type of program originally instead of spending a year or more in a nursing program that led to little career satisfaction. The present study has no information to indicate the amount of satisfaction they will obtain as registered nurses. Since most of these nurses are from the younger age group, their career information may have been too limited or their career decision not certain enough to interest them in entering a longer period of preparation.

The statistical interrelationships described also raise questions regarding the non-white practical nurses. Among the original sample, the non-white group was 19 percent of the total, with the greatest proportion representing the Southern region. Graduation rates for the non-white group were significantly lower than for the white group.[3] Notwithstanding the facts that proportionally fewer of the non-white group graduated, and that they responded to the five-year follow-up questionnaire less frequently (Appendix A) than the white group, a higher proportion was employed as full-time practical nurses than in the white group. The non-white group may be contributing considerably to the higher proportions reporting full-time employment in the Southern region. It is possible that employment in practical nursing for non-white Southern women is a distinction and a highly respected accomplishment. It is also possible that in the South employment in nursing may be more readily available for those who are non-white than employment in some other occupations.

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[2] Public Health Service, National Institutes of Health. *Health Manpower Source Book. Section 2. Nursing Personnel.* U.S. Department of Health, Education, and Welfare, Bureau of Health Professions Education and Manpower Training, Bethesda, Maryland, 1969, p. 10.

[3] Tate and Knopf, op. cit., pp. 128-29.

Related Studies

The number of research studies devoted to practical nurses and practical nursing is steadily growing; however, only a few are devoted to examination of the role of the practical nurse in the health labor force. There are a number of studies concerning the work life of women in the general population which have a direct bearing upon some of the findings of the Nurse Career-pattern Study.

Two of the earlier studies, dating from 1950, reported findings generally consistent with those of the Nurse Career-pattern Study. Alvin L. Bertrand and Marion Souza,[4] studying practical nursing in Louisiana in 1950, concluded that, "In planning facilities and curriculum the needs of the married woman in her middle years with less than high school education should be kept in mind....Motivation and a stable personality seem to be the most important [criteria of] success as a practical nursing student. Admission committees should look for these qualities and not place too great a stress on educational attaintment. In this respect, married older women seem to be the best risks."

According to the Bureau of Labor Statistics,[5] also from data gathered in 1950, "Certain demographic factors--marriage, birth of children, widowhood, and divorce--affect the size and composition of the female work force. Marriage and the birth of children have been found to be the principal factors causing women to leave the work force or to be out of the work force at certain ages..."; "Women are apt to seek reemployment when their children reach school age and their family responsibilities are somewhat diminished..."; "....the influence of age alone on worker rates is not of primary importance...." The study goes on to state, however, that "Changes in social and economic circumstances also affect women's labor force participation rates both directly and because of their influence on the demographic characteristics of the female population."

The factors cited by the Department of Labor as affecting the participation of women in the work force are the same factors described in findings of the Nurse Career-pattern Study. In addition, the trend among young people in the United States toward early marriage and childbearing became evident during the 1960's. This, coupled with the inflationary tendencies in the economy, may affect participation of women in the labor force, especially of those in a service occupation such as practical nursing where employment is generally available.

More recent findings of the Department of Labor also verify the contribution of older married women to the general work force. The Department reports that, "The median age of women workers in the United States in 1968 was 40."[6] In addition, "Nearly half of all women 18 to 64 years old were workers in 1968....Labor force participation was highest among divorced women, 70 percent, and....27 percent of married women living with their husbands were workers." Among mothers, "Labor force participation was highest for those with only school-age children, 49 percent, and lowest among those with children all under three years of age, 25 percent."

Of the practical nurses in this study, the highest proportion employed full time five years after graduation had started their practical nursing studies when they were between 35 and 44 years old. Full-time employment among the practical nurses was also highest among the formerly married. Practical nurses in this study resemble the description of all women workers in the United States. From the descriptive data, it has been assumed that the older respondents had school-age children and that the group of younger practical nurses, many of whom were married after their graduation from practical nursing school, had withdrawn from the labor force because of the presence of pre-school-age children in the home.

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[4] Alvin L. Bertrand and Marion Souza. A Study of Practical Nurse Education and Practical Nursing in Louisiana, 1950-1955. State Department of Education in Louisiana, 1956, p. 36.

[5] Bureau of Labor Statistics. Tables of Working Life for Women, 1950. Bulletin No. 1204. U.S. Department of Labor, Washington, D.C., Government Printing Office, 1956, pp. 1-14.

[6] Wage and Labor Standards Administration. Background Facts on Women Workers in the United States. U.S. Department of Labor, Washington, D.C., 1968, pp. 1-2.

The Department of Labor study goes on to state: "The median years of school completed by women 18 years old and over in the labor force....was 12.3 years" (also somewhat comparable to the practical nurses in this study).

In a discussion of why mothers seek employment outside the home,[7] the Women's Bureau of the U.S. Department of Labor points out that, "For a great majority of working women with young children, economic need is the most compelling reason." Eighty-three percent of working mothers in 1968 came from homes in which the husband was present and about one out of every nine working mothers from families in which the husband's income was below the poverty level. Other factors cited as influencing a mother's decision to seek work include the availability of employment and working hours. "Mothers with young children have a strong preference for part-time and part-year jobs," according to this source. Among families with children under three years of age, 25 percent of the mothers were in the labor force in March 1967. For mothers with children between three and five years old, the proportion was 35 percent, and for mothers with children 6 to 17 years old, 49 percent. Greater proportions of Nurse Career-pattern Study participants reporting family incomes under $5,000 annually were employed full time five years after graduation than those in higher income brackets. Since practical nurses indicated that nursing employment was readily available, it has been assumed that those who left the labor force did so voluntarily.

The Women's Bureau states that the participation of non-white mothers in the labor force was higher than for white mothers, even when young children were in the family. The presence of a female relative in the home appeared to influence the mothers of young children in their decision to work. In families with children under six, 34 percent of the mothers worked when a female relative who was not employed outside the home lived with the family. The proportion was 26 percent for mothers who did not have such assistance. Only 6 percent of children of working mothers received group care in day-care centers or similar facilities in March 1967.

Nurse Career-pattern Study data support the high labor force participation of non-white respondents. The extended family group as a cultural entity among some minority groups may influence a mother's decision to seek employment. In the Nurse Career-pattern Study, no attempt was made to determine arrangements for child care among the working mothers, but the Women's Bureau points out that over half of all children under 12 were cared for in their own homes. Certainly the wages of the practical nurses, as reported in the Nurse Career-pattern Study and the National Federation of Licensed Practical Nurses study which will be described later, would preclude child care by a paid worker in the home. Exploration should be made of factors surrounding the feasibility of practical nurses returning to work while their children are young if adequate day-care facilities are available.

Further emphasizing the primary reason why married women work, the Women's Bureau findings[8] indicate, "Most women work because they or their families need the money they can earn. Even when the income contributed by other family members provides the minimum essentials for living, women work to raise family living standards above the level of poverty or deprivation. They seek to provide opportunities for more education for their children....Relatively few women have the option of working solely for personal fulfillment." Practical nurses may also have been working because of economic necessity. Over two-thirds of those whose husbands' social index classification was five were employed full time, as compared with 23 percent of those whose husbands' social index was one.

Studies cited have indicated a median age of 40 for women workers. If married, their children are probably of school age and their earnings are helping their families achieve a somewhat higher standard of living. This description is not only comparable to Nurse Career-pattern Study findings, but also to National Federation of Licensed Practical Nurses membership. In April 1968, the NFLPN mailed a questionnaire to its entire membership of 31,318.[9] Analysis of the first 5,993 replies indicated that more than three-quarters of the NFLPN members were over 40 years old and that 70.9 percent of those employed worked from 37-1/2 to 45 hours a week. More than half reported earning less than $4,000 a year from their employment; another 25 percent earned between $4,000 and $4,999 annually. Assuming that L.P.N.'s in this latter group were indicating salaries for full-time work, the amount reported approximates the $351-$400 category most frequently reported by Nurse Career-pattern Study participants.

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[7] Wage and Labor Standards Administration, Women's Bureau. Who Are the Working Mothers? Leaflet 37. U.S. Department of Labor, Washington D.C., 1968.

[8] Wage and Labor Standards Administration, Women's Bureau. Why Women Work. U.S. Department of Labor, Washington, D.C., 1968.

[9] Know Your LPNs. The National Federation of Licensed Practical Nurses, New York, 1968, pp. 1-6.

Nurse Career-pattern Study data indicate the existence of regional differences among participants and their work patterns. No doubt these regional differences are reflections of the differences among the communities in which the practical nursing schools in the sample were located. Since practical nurses who remain in the work force continuously during the first five years after graduation appear to be relatively stable geographically, the manpower needs of the community and the potentialities for local employment after graduation should be explored before new programs are considered.

A 1962 survey of practical nursing schools conducted by the Department of Practical Nursing of the National League for Nursing[10] included as one of its recommendations that "Before additional programs of practical nursing are initiated, whether under voluntary or government auspices, a study of the community should be done to determine need for the program, availability of adequate educational and clinical resources, and availability of prepared faculty."

The geographic stability of Negro women workers and practical nurses is described in two sources. A study of geographic mobility of all workers[11] indicates regional movement was highest among white men workers and lowest among Negro women workers. This would add feasibility to the interpretation of Nurse Career-pattern Study data which imply that Negro practical nurses were a stable group making a substantial contribution to the health labor force of the community.

Stability of employment among practical nurses was pointed out by William C. Christenson.[12] In studying graduates of one practical nursing program in Minnesota, as compared to graduates of a diploma and a baccalaureate program in that state, he noted that practical nurse students "....were a relatively stable group with little state to state or community to community movement." The stability of the practical nurse graduates was also demonstrated in their employment. They provided the most employment to the hospital from which they graduated of all three groups (i.e., the diploma graduates to the hospital in which their program was located and the baccalaureate to that where they had their clinical experience). Five years after graduation, 43 percent of the practical nurses were employed full time as compared to 27 percent of the diploma and baccalaureate graduates. Of the practical nurses who were not employed, 84 percent had family-related reasons. Compared to the diploma and baccalaureate graduates, the L.P.N.'s had the least turnover due to job dissatisfaction. Although graduates from all three types of nursing programs showed a positive correlation between the presence of children in the family and lack of employment, the practical nurse group was least influenced by this.

Eleanor Treece studied graduates of practical nursing programs in Minnesota in 1965.[13] The sample consisted of practical nurses who had graduated one, five, and ten years previous to the study. About a fifth of this sample had been over 20 years old when they entered the practical nursing program. For those graduated one year previously, she found that 45 percent were married, while for those graduated five and ten years before, the proportions married were 84.2 percent and 85.2 percent, respectively. Almost three-fifths, or 58 percent, of all the graduates were currently employed in practical nursing, and more than a third had worked in practical nursing continuously since graduation. Pregnancy, family responsibilities, and husband's disapproval were the most frequent reasons cited for periods of inactivity in nursing. More than three-fourths of the entire sample in the study were satisfied with each of the 18 selected working conditions cited. The exceptions were for salary, 57.5 percent, and opportunity for advancement, 61 percent. Opportunity for advancement was not an item specifically asked in the Nurse Career-pattern Study, but graduates of the Minnesota study who planned to continue in their present job for the next two years reported greater satisfaction with the opportunities for advancement than did others. The exact meaning to the practical nurses in the Treece study of the term "opportunities for advancement" is unknown, but the author states, "Even though advancement for licensed practical nurses is limited, they still desire opportunity for promotion."

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[10] Practical Nursing Education Today. National League for Nursing, New York, 1966, p. 25.

[11] Wage and Labor Standards Administration. Facts About Women's Absenteeism and Labor Turnover. U.S. Department of Labor, Washington, D.C., 1969, p. 3.

[12] William C. Christenson. "Practical and College-Degree Nurses Give Longest Employment, Study Shows." Hospital Topics, Chicago, 1964, pp. 30-32.

[13] Eleanor Mae Walters Treece. Vocational Choice and Satisfactions of Licensed Practical Nurses. The League Exchange No. 87. National League for Nursing, New York, 1969.

Among the conclusions of this study, persistence in the practical nursing field is found to be more likely if the graduate is single or widowed or when she expresses a feeling of being fairly well accepted by the community. Married women leave practical nursing primarily to fulfill their responsibilities to their families. These findings, although confined to one Midwest state and based on the respondents' retrospective views of their practical nursing careers, are broadly comparable to those of the Nurse Career-pattern Study. Among the recommendations of the Treece study is a suggestion for "....a longitudinal study of practical nurses from the time of enrollment in a school of practical nursing through the first ten years or so of their service....Such a study would not have to rely on recollections to such a great extent as the present one did." The Nurse Career-pattern Study was designed to fulfill such a need.

Conclusions and Recommendations

Data of the Nurse Career-pattern Study, as presented, give a picture of practical nurses which, although representative of the national sample, also indicates that there are strong local variations. Local needs and characteristics regarding population composition, education, job opportunities, and socioeconomic status of residents must be known before the usefulness of the findings of this study can be estimated in any specific community or area. Data have also shown that, within the larger sample of practical nurses, there are several well-defined subgroups which differ in some characteristics among themselves and from the national group.

1. The findings of this study indicate that there are specific biographical characteristics which relate to employment during the first five years following graduation from a practical nurse program. A composite picture of entering students most likely to contribute to the health labor force as practical nurses five years after graduation would be: Women, over 25 years of age, married to semiskilled or unskilled workers, from modest to low economic family settings, whose life patterns show signs of stability. Their children are probably of school age. Although some may not be high school graduates, they have the ability to learn. They should live in places where there is good transportation and easy access to places of employment.

2. The community must offer an opportunity for steady, satisfying employment. Employment conditions should be such that practical nurses can continue to fulfill their obligations as wives and mothers. Salaries should be adequate to provide incomes that are competitive with jobs calling for the same or lesser educational preparation.

3. As long as women have small children at home, it will be particularly difficult to provide working conditions to bring them into full-time employment unless there is a definite financial need.

4. If practical nurses can be kept in the work force, even part time, they are more likely to continue to be employed during this five-year period than if they completely withdrew from the work force soon after graduation.

5. Practical nursing schools, in cooperation with local employing agencies, might assess the potential work contribution of graduates with a view to the possibility of amending working conditions so as to encourage continuity of employment throughout marriage and motherhood. Long-term career planning especially for young graduates might be undertaken by the schools shortly before the practical nurses graduate.

6. The few practical nurses who went on to qualify for registered nurse licensure paid for their own education through savings and earnings, occasionally assisted by scholarship aid. Many practical nurses are mothers and the immediate financial needs in their homes are great. A plan for offering financial assistance to practical nurses desiring to become registered nurses should be developed and tested to determine its usefulness in bringing about more upward movement of the interested and qualified.

7. Admissions and guidance personnel should be thoroughly familiar with the variations within the occupation of nursing and with the contents of this and similar studies in order to assist prospective nursing applicants in selecting initially the program appropriate for them.

8. The role of practical nursing as an occupation and means of livelihood for women in minority groups needs to be studied more deeply.

9. From the small number of men in this study, it is difficult to draw conclusions regarding the male practical nurse; it is evident, however, that the salaries reported would not be adequate for married men. If men are to remain in practical nursing, their role, functions, and salaries should be reevaluated.

10. The Nurse Career-pattern Study can provide baseline data for many areas in practical nursing which bear further study. Among these are:

    a. To which groups within the culture does practical nursing have the deepest appeal occupationally, economically, and socially?

    b. Most practical nurses state that their work has met their expectations. Is continuity in practical nursing based on satisfaction with the occupation or could continuity be a result of the fact that, for some women, practical nursing is one of the few available occupations?

    c. As their nursing role and responsibilities increase, to what extent are nursing courses, and especially courses in pharmacology and medications, readily available to practical nurses?

    d. At both one and five years after graduation most practical nurses occupy staff positions on medical, surgical, and general nursing units in hospitals. Does the quality of nursing performance change over a period of time? How do institutions reward long-term employment at the practical nursing level?

    e. Do practical nurses view themselves as career-oriented or, as the data seem to indicate, primarily family-oriented, with their work as an important supplement to their otherwise full lives?

In conclusion, this study has described the work life of a sample of practical nurses for the first five years following graduation from the practical nursing program. Factors influencing work force participation have been presented. Study findings have resulted in recommendations relating to practical nursing education, employment, and suggested areas for further study.

APPENDIX A

METHOD OF PROCEDURE

A total of six questionnaires are included in the longitudinal plan of the Nurse Career-pattern Study. This report is concerned with respondents who have completed four of these questionnaires: the first at the beginning of their practical nursing program, the second at graduation, the third one year after graduation, and the fourth five years after graduation. At the end of the 10- and 15-year intervals after graduation, the remaining two questionnaires will be sent. Because the original study participants were students entering schools of practical nursing, the study sample was selected on the basis of schools rather than individual participants. A complete description of sample and population data has been published.[1]

The Questionnaire

The fourth questionnaire was designed to achieve certain objectives. These were to update information regarding participants' marital status, number of children, occupation and education of spouse, current place in the health labor force, income from nursing, organizational affiliation, and additional nursing education. The questionnaire also asked if respondents had engaged in health-oriented community activities and whether or not nursing had met their expectations in terms of job satisfaction and income.

Early in 1964, the fourth questionnaire was constructed and used with a trial group.[2] In general, the questionnaire as designed was the questionnaire as eventually used except for two items. The first of these items concerned participants' nursing education after graduation from the practical nursing program. Third questionnaire returns, one year after graduation, indicated that this item should be reconstructed to attain clarity of response. Therefore, it was revised for the fourth questionnaire. An additional item asking respondents to give the approximate amount of time they had not been employed during the past five years was included.

Collection of the Data

As was done in the earlier parts of this study, all information from the respondents five years after graduation was gathered by mailed questionnaire. Data given in the tables of this report were obtained from the practical nurses themselves. The participants had all entered schools of practical or vocational nursing in the fall of 1962, and for the most part had graduated in 1963. The mailing of the third questionnaire had been spaced according to graduation dates of the various schools so that practical nurses would be submitting the information about themselves at least one full year after graduation. Because the fourth questionnaire was intended to gather data after a much longer interval, i.e., five years after graduation, it was assumed that a few months more or less would make little difference in the responses. Therefore, all of the fourth questionnaires were mailed at the same time to those participants who had graduated five years before and who had returned a questionnaire at the time of their graduation. On the third questionnaire, practical nurses had been asked to give the address at which they could be reached four years hence. As a check on the current accuracy of the addresses, a return post card was mailed to all participants in January, 1967. In the few cases in which no updated address was available, the home address on the origional questionnaire was used.

In early September, 1968, the fourth questionnaire was sent to participants' homes. It was accompanied by an explanatory letter and a self-addressed, stamped envelope. The same follow-up procedure that had been used for the third questionnaire was again employed: reminding non-respondents at intervals of three weeks that a reply was desired. The first reminder was a post card, the second included another letter, questionnaire, and return envelope, and when a third reminder was necessary, it was sent by certified mail.[3] If any of the mailings previous to the certified letter was returned by the post office, written requests were made to the schools from which the nurses had graduated asking for any other known addresses. By this procedure, 2,289 fourth questionnaires were sent out. The third questionnaire had been sent to 2,299 participants. The loss of ten persons before the fourth questionnaire was mailed is accounted for by seven deaths and by the removal of three persons from the study for other reasons.

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[1] Barbara L. Tate and Lucille Knopf. Nurse Career-pattern Study. Part I: Practical Nursing Programs. National League for Nursing, New York, 1968, Chap. III.

[2] Ibid., p. 12.

[3] Samples of letters, questionnaires, and post card appear in Appendix B.

Table A-1 presents the number and percentage of questionnaire returns after original mailing and after each follow-up procedure by geographic region of practical nursing school and for the total sample. Forty-three and three-tenths percent returned questionnaires within three weeks, thereby obviating the need for a follow-up. Another 15.2 percent responded after one follow-up, and 14 percent more after two reminders. The total response of 81.8 percent was obtained by the addition of 9.3 percent who responded after three contacts. Regional variations in percentage of total questionnaires returned were slight, extending from 79.1 percent in Region IV to 83.4 percent in Region II.

Table A-1. Return of Questionnaire Five Years After Graduation, by Follow-up Procedure and Geographic Region of School*

Region	No. of Practical Nursing Schools Represented	Graduates Sent Q4		Returned Before Follow-up		Returned Before Second Follow-up		Returned Before Third Follow-up		Total Returned	
		No.	%	No.	%	No.	%	No.	%	No.	%
Region I	34	677	100.0	278	41.1	387	57.2	484	71.5	555	82.0
Region II	25	622	100.0	302	48.6	405	65.1	471	75.7	519	83.4
Region III	37	650	100.0	249	38.3	355	54.6	462	71.1	529	81.4
Region IV	21	340	100.0	162	47.6	192	56.5	243	71.5	269	79.1
All regions	117	2,289		991	43.3	1,339	58.5	1,660	72.5	1,872	81.8

*Region I (North Atlantic) Conn., Del., D.C., Me., Mass., N.H., N.J., N.Y., Pa., R.I., Vt.
II (Midwestern) Ill., Ind., Iowa, Kan., Mich., Minn., Mo., Neb., N.D., Ohio, S.D., Wis.
III (Southern) Ala., Ark., Canal Zone, Fla., Ga., Ky., La., Md., Miss., N.C., Okla., Puerto Rico, S.C., Tenn., Tex., Va., Virgin Islands, W.Va.
IV (Western) Alaska, Am. Samoa, Ariz., Calif., Colo., Hawaii, Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo.

Four hundred and seventeen fourth questionnaires were not returned (Table A-2). In the majority of cases: those enumerated as "lack of address," "office error," and "deaths and other," the questionnaires apparently did not come to the attention of the participants. There were 190 persons, or 45.6 percent of non-respondents, who could not be reached because of lack of address. This group was made up of those whose letters were returned by the

Table A-2. Fourth Questionnaires Not Returned Five Years After Graduation, by Geographic Region of School

Region	No. of Practical Nursing Schools Represented	No. of Graduates Sent Q4	Questionnaires Not Returned								
			No.	Reason							
				Lack of Address		Office Error		Deaths and Other		No Response	
				No.	%	No.	%	No.	%	No.	%
Region I	34	677	122	67	54.9	15	12.3	5	4.1	35	28.7
Region II	25	622	103	46	44.7	18	17.5	4	3.9	35	34.0
Region III	37	650	121	36	29.8	22	18.2	11	9.1	52	43.0
Region IV	21	340	71	41	57.7	7	9.9	1	1.4	22	31.0
All regions	117	2,289	417	190	45.6	62	14.9	21	5.0	144	34.5

post office without any forwarding address and whose school could supply no further address. Sixty-two persons, or 14.9 percent, were categorized as non-respondents due to office error. This proportion included a certain number of failures to follow up after the school sent an additional address, some overlooking of the obligation to write to a school, and a few mistakes in addressing envelopes. Among the 21 whose non-response is classified under "deaths and other," ten had died, two were out of the country, and the others were not contacted for a variety of reasons. Information concerning the latter group came from their relatives or friends, from the practical nursing schools, or from the post office when letters were undeliverable. In addition to those just described who apparently did not receive the questionnaire, 144 participants, or 34.5 percent, failed to respond even though there was reason to believe they had received the questionnaire. It is not known how many of these deliberately decided not to respond and how many procrastinated indefinitely in spite of three reminders.

In terms of the percentage of response per school, 100 percent of participants from 13 schools sent in completed questionnaires (Table A-3). The median response rate per school was 84.2 percent. The school return rates in the lowest category were percents of 58.8, 57.1, 52.4, and 47.1. In each of these cases, the school had responded with information about further addresses. The only common factor among the schools seemed to be that they were all located in metropolitan areas.

Table A-3. Returns of Fourth Questionnaire from
Graduates of Schools of Practical Nursing
Five Years After Graduation

Percent of Returns	Schools	
	No.	%
100 percent	13	11.1
95.0-99.9	1	0.9
90.0-94.9	19	16.2
85.0-89.9	21	17.9
80.0-84.9	25	21.4
75.0-79.9	15	12.8
70.0-74.9	6	5.1
65.0-69.9	8	6.8
60.0-64.9	5	4.3
59.9 and under	4	3.4
Total	117	100.0

Variables Related to Response and Non-response

Biographical characteristics and other variables from the initial questionnaire were statistically examined by response or non-response to the five-year follow-up questionnaire. Significant relationships were found to exist in three instances: among the males, the formerly married, and the non-white groups (probability level of chi-square less than .001). Male participants returned questionnaires less frequently, 62.5 percent, than did female respondents, 82.6 percent. The total number of males in the study is so small, only 2.1 percent of the entire sample, that bias from this source is negligible; however, the description of the male practical nurses as given in Chapter IV may be affected by the response pattern.

Marital status at the time of entrance to the practical nursing program was also related to response five years after graduation. Those who were formerly married when they started their practical nursing studies responded less frequently, 75 percent, as compared to the total group response of 81.8 percent. The formerly married comprised 9.7 percent of the sample which received questionnaires.

The non-white group was 17.4 percent of the total sample and their response was 66.6 percent, considerably lower than the total response of 81.8 percent. Data relating to the formerly married and non-white must take into consideration the fact that possible bias may exist. None of the other variables examined were significantly related to response or non-response patterns of the five-year follow-up questionnaire. At the one year after graduation point in time, there was no statistical difference in the responding or non-responding groups.

Coding and Analysis of Data

Coding and checking of the fourth questionnaire followed the pattern established for previous questionnaires. Because many of the items had appeared on previous questionnaires, only minimal refinement of codes was necessary. Most of the hand coding was done by an assistant especially trained for this work. After all responses had been interpreted numerically, IBM cards were punched and checked by means of verification and sorting. For those who had not returned the fourth questionnaire, this information was recorded in a previously designated column of the IBM card containing biographical data.

The descriptive material reported in Chapter II was the result of the first 7094 IBM computer run. Subsequent to this, all information relating to the practical nurse sample was transferred to magnetic tape and edited for any necessary corrections. The two additional programs already described[4] then interpreted taped information to produce the cross tabulations given in Chapter III.

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[4] Tate and Knopf, op. cit., p. 18.

APPENDIX B

CORRESPONDENCE AND QUESTIONNAIRES FOR DATA COLLECTION

80

Fourth Questionnaire

2682

NATIONAL LEAGUE FOR NURSING
Research and Development

5
6_

NURSE CAREER-PATTERN STUDY

7
8_
9_
10_
11_

Name: ______________________ (please print)

Address: ______________________

____

____

(city and state) (zip)

Name and address of person who could forward mail to you if you move:

____

______________________ 12
13_

______________________ 14_

1. L.P.N. or L.V.N. license number (list all licenses as L.P.N.; L.V.N.)
______ in state of ______
______ in state of ______
______ in state of ______

2. ☐ Single ☐ Divorced
☐ Married ☐ Separated
☐ Widowed

3. Number of children ____ 15
16_

4. If married, did your marriage take place after graduation from the P.N. or V.N. program? ☐ Yes ☐ No 17_

Husband's (wife's) occupation? ______ Employer? ______ 18
19_

Highest number of years of school husband (wife) completed: (check one) 20_ 21_
☐ 8 or less ☐ 11 ☐ 14
☐ 9 ☐ 12 ☐ 15
☐ 10 ☐ 13 ☐ 16 and over

5. Are you working as an L.P.N. or L.V.N.? (check only one) 22_ 23_
☐ Yes, full time
☐ Yes, part time - 1-16 hours per week
☐ Yes, part time - 17-32 hours per week
☐ Yes, part time - 33 or more hours per week
☐ No

6. If you are at present not employed as an L.P.N. or L.V.N., what is your primary reason for not working? 24_
☐ Family/personal needs
☐ Not financially necessary
☐ Earn more at other work
☐ No longer interested in L.P.N. or L.V.N. work
☐ Cannot obtain desired position or hours
☐ Other (specify) ______

7. Check the field in which you are now working: 25
26_
☐ Medical Nursing
☐ Surgical Nursing
☐ Maternity Nursing
☐ Child Nursing
☐ Psychiatric Nursing
☐ General Nursing
☐ Special Service (specify) ______
☐ Health field but not nursing (specify) ______
☐ Other (specify) ______
☐ Not working

8. Check the type of employer for whom you are now working: 27
28_
☐ Hospital
☐ Nursing Home
☐ Public Health Agency
☐ School - public or private
☐ School of Nursing
☐ Industry
☐ Private Patient (private duty)
☐ Doctor, Dentist, etc.
☐ Other (specify) ______
☐ Not working

9. What type of position do you now hold: 29
30_
☐ Staff Nurse
☐ Private Duty Nurse
☐ Head Nurse
☐ Supervisor
☐ Teacher
☐ Administrator
☐ Consultant
☐ Researcher
☐ Other (specify) ______
☐ Not working

10. How many times have you changed positions or type of work since graduation from the P.N. or V.N. school? ___ (Do not count promotions or change of floor or unit within one institution) 31_

If you have changed position or type of work since graduation, what was the one main reason for the most recent change from an L.P.N. or L.V.N. position? 32_

____

11. In how many states have you worked as an L.P.N. or L.V.N.? ____ 33_

12. What organization(s) related to the health field do you belong to? 34
35_
36_
37_
☐ National Federation of Licensed Practical Nurses
☐ Practical or Vocational Nurse School Alumnae
☐ American Nurses' Association
☐ National League for Nursing
☐ Other (specify) ______

13. What community activities related to the health field have you been engaged in during the past year? 38
39_

______________________ 40_

14. Have you attended an education program leading to eligibility for R.N. licensure? ☐ Yes ☐ No 41_
If yes, in what years? 19__ 19__ 19__ 19__ 19__ 42_

What type of program? ☐ Associate Degree ☐ Diploma ☐ Baccalaureate 43
Did you graduate from a program leading to R.N. licensure? ☐ Yes ☐ No 44_
Are you licensed as an R.N.? ☐ Yes ☐ No 45_

15. Have you taken any courses to improve your practical nursing skills (other than those given on the job)? ☐ Yes ☐ No 46_ 47_

If yes, describe ______________________ 48
49_

16. How did you finance the education reported in questions 14 and 15? (check only one) 50_ 51_
☐ Scholarship or fellowship
☐ From personal or family savings
☐ Working while going to school
☐ Scholarship and savings
☐ Savings and earnings
☐ Scholarship and earnings
☐ Scholarship, savings, and earnings
☐ Other (describe) ______
☐ No charge

17. Has your work in practical or vocational nursing met your expectations in terms of: 52
53_
54_
55_
Personal satisfaction? ☐ Yes ☐ No
Salary? ☐ Yes ☐ No
Working conditions? ☐ Yes ☐ No
or ☐ I cannot answer these questions because I have never worked as an L.P.N. or L.V.N.

18. Has employment been available whenever desired? ☐ Yes ☐ No 56_

19. If you have worked as an L.P.N. or L.V.N. during the past year, what was your approximate monthly salary before deductions? 57
58_
☐ 0-$100
☐ $101-$200
☐ $201-$250
☐ $251-$300
☐ $301-$350
☐ $351-$400
☐ $401-$451
☐ $451-$500
☐ Over $500

20. Counting both full and part-time work, have there been any periods of time since graduation when you have not been employed as an L.P.N. or L.V.N.? ☐ Yes ☐ No 59_

If yes, adding them all together, check the total period you were not working: 60_ 61
62_
☐ Less than 5 months
☐ 5 months-1 year
☐ Over 1 year-less than 2
☐ Over 2 years-less than 3
☐ Over 3 years-less than 4
☐ Over 4 years-less than 5
☐ Over 5 years

BLT
CPS - 23
10 M

nursing services — nursing education — citizen participation

national league for nursing, inc.

NLN

• 10 COLUMBUS CIRCLE, NEW YORK, N.Y. 10019
AREA CODE 212
• JUdson 2-1022

Greetings:

When you entered nursing school, when you graduated and about a year after graduation you completed questionnaires for the Nurse Career-pattern Study; we are now asking you to complete a fourth questionnaire.

As you may recall, this study has been designed to follow a group of nurses, of which you are one, through a number of years as an employed person, housewife, or mother. We are interested in learning what well-prepared nurses do after they complete their basic nursing education. We are particularly interested in when and why they stop working and when and why they return to work. We would like to have information about all work, educational and community activities whether or not they are in the nursing field.

The data from this study has been very useful in helping schools with selection and recruitment of students, helping employers improve working conditions and making more effective use of nurses.

Since it is approximately five years since you graduated, we are asking you to complete this questionnaire and return it to us in the enclosed envelope as soon as possible. Will you help us to keep your current address accurate so that in later years we may again send you a similar questionnaire?

Thank you very much for your cooperation.

Sincerely,

Barbara L. Tate

Barbara L. Tate
Director
Nurse Career-pattern Study

BLT:el
CPS-24

"...that the nursing needs of the people will be met."

National League for Nursing, Inc.
10 Columbus Circle, New York, New York 10019

The questionnaire you completed for the Nurse Career-pattern Study has been received. Thank you for your cooperation.

Sincerely,

Barbara L. Tate
Barbara L. Tate, Director
Nurse Career-pattern Study

CPS-16

National League for Nursing, Inc.
10 Columbus Circle, New York, New York 10019

Dear

To date we have not received your questionnaire for the Nurse Career-pattern Study. Would you please fill it in and return it as soon as possible?

Thank you for your cooperation.

Sincerely,
Barbara L. Tate
Barbara L. Tate, Director
Nurse Career-pattern Study

CPS-15

nursing services—nursing education—citizen participation

NLN

national league for nursing, inc.

• 10 COLUMBUS CIRCLE, NEW YORK, N.Y. 10019
AREA CODE 212
• JUdson 2-1022

About one month ago we sent questionnaires to all of the nurses from your school who have been participating in the Nurse Career-pattern Study. The majority of these have been received but as yet we have not received one from you.

This study is designed to give a complete picture of a group of nurses and their careers as nurses, wives and mothers. It is essential that we have all of the questionnaires completed. Would you please take a few minutes to complete the enclosed questionnaire and return it to us as soon as possible?

Thank you very much.

Sincerely,

Barbara L Tate
Barbara L. Tate, Director
Nurse Career-pattern Study

BLT:ph
CPS-26

"...that the nursing needs of the people will be met."

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nursing services—nursing education—citizen participation

NLN

national league for nursing, inc.

• 10 COLUMBUS CIRCLE, NEW YORK, N.Y. 10019
AREA CODE 212
• JUdson 2-1022

Twice over the past months, we have mailed to you a short questionnaire from the Nurse Career-pattern Study. As yet we have not received a completed questionnaire from you.

While you were in nursing school you helped this study greatly by completing three different questionnaires. The information from those questionnaires has already been used in several areas to help in more effective recruitment and selection of students. The more nurses complete the questionnaires the more useful the information becomes. This is true even if you are not currently working. Will you please take a few minutes to complete the questionnaire and return it to us?

If you have a reason for not completing the questionnaire would you please write the reason on the questionnaire and return it?

Thank you very much for your time and attention.

Sincerely,

Barbara L. Tate
Barbara L. Tate
Director
Nurse Career-pattern Study

BLT:el

CPS-25

"...that the nursing needs of the people will be met."

SAMPLE OF LETTER TO DIRECTOR OF SCHOOL REQUESTING ADDRESSES

Dear

The fourth questionnaire for the Nurse Career-pattern Study was sent to the participants who entered your school of nursing in the fall of 1962. As of today, responses have been received from _____ of the _____ nurses from whom they were requested.

Mail sent to the following nurses has been returned by the post office as undeliverable.

1. (name, initial, pre. and post marr.)
   e.g., Mrs. Mary Ashton Hawlin

(each address used for that person
(

(
(

(
(

2. Name -- see above

(
(

(
(

etc.

If you know of any other address or addresses for these nurses, would you please send them to us on the enclosed post cards. If you know of no other addresses, please return the cards indicating this fact.

Thank you for your assistance.

Sincerely,

Barbara L. Tate, Director
Nurse Career-pattern Study

BLT:
Encls.